# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10 IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:	) ) CERCLA Docket No. 10-2021-0088
Monsanto Chemical Co. Superfund Site	)
Soda Springs, Idaho	)
P4 Production, L.L.C.,	
Respondent.	) ADMINISTRATIVE SETTLEMENT ) AGREEMENT AND ORDER ON
Proceeding Under Sections 104, 107	) CONSENT FOR SUPPLEMENTAL
and 122 of the Comprehensive	) REMEDIAL INVESTIGATION /
Environmental Response, Compensation,	) FOCUSED FEASIBILITY STUDY
and Liability Act, 42 U.S.C. §§ 9604,	)
9607 and 9622.	)

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#### I. JURISDICTION AND GENERAL PROVISIONS

- 1. This Administrative Settlement Agreement and Order on Consent ("Settlement") is entered into voluntarily by the United States Environmental Protection Agency (EPA), Idaho Department of Environmental Quality (IDEQ), and P4 Production, L.L.C. (Respondent). This Settlement provides for the performance of a supplemental remedial investigation and focused feasibility study (SRI/FFS) by Respondent and the payment of certain response costs incurred by the United States and IDEQ at or in connection with the Monsanto Chemical Co. Superfund Site (the "Site") generally located in Soda Springs, Idaho.
- 2. This Settlement is issued under the authority vested in the President of the United States by Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9607 and 9622 (CERCLA). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2923 (Jan. 29, 1987), and further delegated to Regional Administrators by EPA Delegation Nos. 14-14C (Administrative Actions Through Consent Orders, Jan. 18, 2017) and 14-14D (Cost Recovery Non-Judicial Agreements and Administrative Consent Orders, Jan. 18, 2017). These authorities were further redelegated by the Regional Administrator of EPA Region 10 to the Director, Superfund and Emergency Response Division, by Regional Delegations Nos. 14-14-C and 14-14-D. This Settlement is entered into by IDEQ pursuant to Idaho's Environmental Protection & Health Act, Idaho Code §§ 39-101 to 39-130, Idaho's Hazardous Waste Management Act, Idaho Code §§ 39-4401 to 39-4432, Idaho's Water Quality Act, Idaho Code §§ 39-3601 et seq., and the rules and standards promulgated pursuant thereto.
- 3. EPA, IDEQ, and Respondent (collectively "the Parties") recognize that this Settlement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement, the validity of the findings of facts, conclusions of law, and determinations in Section V (Findings of Fact) and VI (Conclusions of Law and Determinations) of this Settlement. Respondent agrees to comply with and be bound by the terms of this Settlement and further agrees that it will not contest the basis or validity of this Settlement or its terms, or the authority and jurisdiction of IDEQ and EPA to enforce this Settlement or its terms.

### II. PARTIES BOUND

4. This Settlement is binding upon IDEQ, EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter Respondent's responsibilities under this Settlement.

- 5. Each undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement and to execute and legally bind Respondent to this Settlement.
- 6. Respondent shall provide a copy of this Settlement to each contractor hired to perform the Work required by this Settlement and to each person representing Respondent with respect to the Site or the Work, and shall condition all contracts entered into under this Settlement upon performance of the Work in conformity with the terms of this Settlement. Respondent or its contractors shall provide written notice of the Settlement to all subcontractors hired to perform any portion of the Work required by this Settlement. Respondent shall nonetheless be responsible for ensuring that its contractors and subcontractors perform the Work in accordance with the terms of this Settlement.

#### III. STATEMENT OF PURPOSE

- 7. In entering into this Settlement, the objectives of the Parties are: (a) to further determine the nature and extent of groundwater contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, by conducting a Supplemental Remedial Investigation as more specifically set forth in the Statement of Work (SOW) attached as Appendix A to this Settlement; (b) to identify and evaluate groundwater remedial alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Supplemental Remedial Investigation/Focused Feasibility Study (SRI/FFS) as more specifically set forth in the SOW in Appendix A to this Settlement; and (c) to recover response and oversight costs incurred by EPA and IDEQ with respect to this Settlement.
- 8. The Work conducted under this Settlement is subject to approval by EPA and shall provide all appropriate and necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 (NCP). Respondent shall conduct all Work under this Settlement in compliance with CERCLA and the NCP, and consistent with all applicable EPA guidances, policies, and procedures.

## IV. **DEFINITIONS**

9. Unless otherwise expressly provided in this Settlement, terms used in this Settlement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement or its attached appendices, the following definitions shall apply:

"Affected Property" shall mean all real property at the Site and any other real property where EPA determines, at any time, that access, land, water, or other resource use

restrictions are needed to implement the SRI/FFS, including, but not limited to, the following properties:

The P4 Production, L.L.C., property bordering State Highway 34 in portions of Sections 1, 6, 20, 21, 25, 29, 30, 31, 32, and 36 in Township 8 South, Range 42 East of the Boise Meridian, and

Soda Springs High School.

"Agency" shall mean EPA and/or IDEQ.

"CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

"Deliverables" shall mean the documents Respondent is required to submit pursuant to this Settlement, the SOW, or any approved work plans, and any additional documents identified in writing by EPA and determined to be Additional Work in accordance with Paragraph 42 ("Modification of the SRI/FFS Workplan") of this Settlement. All Deliverables under this Settlement are subject to review, comment, modification, and approval as described in Section X of this Settlement.

"DOJ" shall mean the United States Department of Justice and its successor departments, agencies, or instrumentalities.

"Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement, where the last day would fall on a Saturday, Sunday, or federal or State holiday, the period shall run until the close of business of the next working day.

"Effective Date" shall mean the effective date of this Settlement as provided in Section XXXIV.

"Engineering Controls" shall mean constructed containment barriers or systems that control one or more of the following: downward migration, infiltration, or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

"EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

"EPHA" shall mean the Idaho Environmental Protection and Health Act, Idaho Code §§ 39-101, et seq.

"EPA Hazardous Substance Superfund" shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. §9507.

"Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing deliverables submitted pursuant to this Settlement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section XII (Property Requirements) (including, but not limited to, cost of attorney time and any monies paid to secure or enforce access or land, water, or other resource use restrictions, including, but not limited to, the amount of just compensation), Section XVI (Emergency Response and Notification of Releases), Paragraph 105 (Work Takeover), Paragraph 128 (Access to Financial Assurance), community involvement (including, but not limited to, the costs of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e)), Section XVIII (Dispute Resolution), and all litigation costs. Future Response Costs shall also include Agency for Toxic Substances and Disease Registry (ATSDR) costs regarding the Site.

"HWMA" shall mean Idaho's Hazardous Waste Management Act of 1983, Idaho Code §§ 39-4401 to 39-4432.

"IDEQ" shall mean the Idaho Department of Environmental Quality and its successor departments, agencies, or instrumentalities.

"Institutional Controls" or "ICs" shall mean Proprietary Controls and state or local laws, regulations, ordinances, zoning restrictions, environmental covenants under the Uniform Environmental Covenants Act, or other governmental controls or notices that: (a) limit land, water, or other resource use to minimize the potential for human exposure to Waste Material at or in connection with the Site; (b) limit land, water, or other resource use to implement, ensure non-interference with, or ensure the protectiveness of the response action pursuant to this Settlement; and/or (c) provide information intended to modify or guide human behavior at or in connection with the Site.

"Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. Rates are available online at <a href="https://www.epa.gov/superfund/superfund-interest-rates">https://www.epa.gov/superfund/superfund-interest-rates</a>.

"Monsanto Superfund Site Special Account" shall mean the special account within the EPA Hazardous Substance Superfund, established for the Site by EPA pursuant to Section 122(b)(3) of CERCLA, 42 U.S.C. § 9622(b)(3), and previously established by an EPA Memorandum on August 28, 2009.

"National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

"Non-Settling Owner" shall mean any person, other than a Respondent, that owns or controls any Affected Property, including the city of Soda Springs. The clause "Non-Settling Owner's Affected Property" means Affected Property owned or controlled by Non-Settling Owner.

"Owner Respondent" shall mean any Respondent that owns or controls any Affected Property, including P4. The clause "Owner Respondent's Affected Property" means Affected Property owned or controlled by an Owner Respondent.

"Paragraph" shall mean a portion of this Settlement identified by an Arabic numeral or an upper- or lower-case letter.

"Parties" shall mean EPA, IDEQ, and Respondent.

"Proprietary Controls" shall mean easements or covenants running with the land that (a) limit land, water, or other resource use and/or provide access rights and (b) are created pursuant to common law or statutory law by an instrument that is recorded in the appropriate land records office.

"RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

"Respondent" shall mean P4 Production, L.L.C.

"Section" shall mean a portion of this Settlement identified by a Roman numeral.

"Settlement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXXII (Integration/Appendices)). In the event of conflict between this Settlement and any appendix, this Settlement shall control.

"Site" shall mean the Monsanto Chemical Co. Superfund Site, encompassing approximately 900 acres, located in Caribou County, Idaho, approximately 1.5 miles north of Soda Springs and depicted generally on the map attached as Appendix B.

"State" shall mean the State of Idaho.

"State Response Costs" shall mean all direct and indirect costs incurred by IDEQ, after the Effective Date, but not limited to, costs incurred in preparing the Settlement, reviewing of Deliverables, overseeing implementation of the Work, review and selection of the appropriate remedial action to be taken at the Site or otherwise implementing,

overseeing, or enforcing this Settlement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred to obtain Site access (including, but not limited to, costs and attorney's fees and any monies paid to secure access, including, but not limited to, the amount of just compensation), emergency response and the costs incurred pursuant to Paragraph XX (Community Involvement Plan) and Section XX (Work Takeover).

"Statement of Work" or "SOW" shall mean the document describing the activities Respondent must perform to develop the SRI/FFS for the Site, as set forth in Appendix A to this Settlement. The Statement of Work is incorporated into this Settlement and is an enforceable part of this Settlement as are any modifications made thereto in accordance with this Settlement.

"Transfer" shall mean to sell, assign, convey, lease, mortgage, or grant a security interest in, or where used as a noun, a sale, assignment, conveyance, or other disposition of any interest by operation of law or otherwise.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

"Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) or Idaho Code § 39-7203(4); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any "hazardous waste" as defined by Idaho Code § 39-4403(8), any "pollutant" as defined by Idaho Code § 39-3602(24) and IDAPA 58.01.02.010.79, any "deleterious materials" as defined by IDAPA 58.01.02.010.21, and any "hazardous materials" as defined by IDAPA 58.01.02.010.47.

"Work" shall mean all activities and obligations Respondent is required to perform under this Settlement, except those required by Section XIV (Record Retention).

"SRI/FFS Work Plan" shall mean the Work Plan described further in the SOW.

## V. FINDINGS OF FACT

10. The Monsanto Chemical Co. Superfund Site includes an elemental phosphorus manufacturing plant (the "Plant") located approximately one mile north of Soda Springs, Idaho on an approximately 540-acre property owned and operated by Respondent. The Plant is approximately 10 miles south of the Blackfoot Reservoir, and 2,000 feet east of Soda Creek in a broad semi-arid rural valley with mixed agricultural, residential, and industrial uses. Soda Creek is the closest drainage system to the Plant. It flows southward into the Alexander Reservoir which abuts the southwest corner of Soda Springs and is a tributary of the Bear River, which flows in a generally southwesterly direction from Soda Springs. The principal groundwater formation in the area is within the basalt of the Blackfoot Lava Field and is recharged in part by

the Blackfoot Reservoir. Its water is used for domestic, livestock, irrigation, municipal, commercial and industrial purposes.

- 11. Soda Springs obtains its municipal water supply from two springs: Formation Spring which is located northeast of the Plant and discharges from limestone of the Aspen mountain range; and Ledger Spring which is located to the southeast of the Plant and discharges from the basalts. Formation Spring is upgradient and Ledger Spring is side-gradient of the groundwater plume(s); neither are affected by the Site. Groundwater drawn from the municipal springs and private wells within three miles of the Plant provides potable water to a population of approximately 3,500 people and is used to irrigate farmland. Total depths of domestic wells range between 17 and 108 feet below ground surface. No drinking water testing to date has revealed contamination in the municipal water supply above maximum contaminant levels (MCLs) or remediation goals (RGs) for constituents of concern related to the Site.
- 12. There is no known alternate supply of potable water currently in use in the area. A complex hydrogeological environment exists in the Soda Springs area. Faulting and regional ground water discharge areas influence the groundwater flow pattern. The folding, faulting, layered basalt aquifer, and rugged topography have created a myriad of complex, discrete groundwater flow systems. Hydraulic connections among area potable and non-drinking ground water sources via basalt fractures and joints are probable.
- 13. Ongoing monitoring including the sampling of surface water, spring water, and groundwater monitoring wells since the time of the 1997 Record of Decision ("ROD") has indicated that selenium and cadmium are not attenuating as predicted. The boundaries of the selenium plume have only recently been defined. As of June 2019, one monitoring well (TW-65) at the southern IC boundary shows selenium concentrations slightly above the remediation goal for selenium (0.05 mg/L). Wells installed by Respondent in 2018, and by the Greenfield Environmental Multistate Trust for the Kerr McGee CERCLA site in Soda Springs in 2016-2017 define the southernmost end of the selenium plume. Based on domestic well sampling, it does not appear that domestic wells within Soda Springs have been impacted by contamination from the site.
- 14. The Site was purchased in 1952 and was developed as a production plant to process local phosphate-rich ore to manufacture elemental phosphorus. No other industrial or

Pharmacia LLC has no ownership interest in P4 or today's Monsanto Company, today's Monsanto Company is

transferred ownership of P4. Today, Pharmacia LLC is a wholly owned subsidiary of Pfizer, Inc. Although

<sup>&</sup>lt;sup>1</sup> For purposes of this Settlement, P4 states that Pharmacia LLC, which has had various names throughout its history ("Monsanto Chemical Company" from before 1952 to April 1964, "Monsanto Company" from April 1964 to March 2000, "Pharmacia Corporation" from March 2000 to 2012 and "Pharmacia LLC" from 2012 to present), originally purchased and developed the Site. Pharmacia, when it was known as "Monsanto Company," entered the 1997 Consent Decree for the Site. Also in 1997, Pharmacia formed a new subsidiary – P4 Production, L.L.C. ("P4") – and transferred the Plant and associated operations to that entity, which has continued to own and operate the Plant since then. Through a series of corporate reorganizations in 2000 and 2001, today's Monsanto Company was created and

significant activity is known to have occurred at or on the Plant property. Respondent also operates local mines that supply the plant. In 1984, Golder Associates, Inc. (Golder) was engaged to characterize groundwater impacts from past and current operations after a landowner immediately south of the Site complained that livestock drinking water from several nearby springs experienced problems related to excess fluoride exposure.

- 15. The pre-ROD investigation showed that groundwater under the Site contained elevated levels (above MCLs) of fluoride, cadmium, selenium, and sulfate. Respondent concluded that the Underflow Solids Pond, Northwest Pond, Old Hydroclarifier, and intermediate processing steps in the elemental phosphorous production process were leaking the contaminants of concern (COCs) into the subsurface soil and underlying groundwater system.
- 16. In response to a release of hazardous substances at the Site, an RI/FS for the Site was performed pursuant to an Administrative Order on Consent issued by EPA on March 19, 1991. Based on the results of the RI/FS, EPA issued a ROD for the Site on April 30, 1997. The remedial action for groundwater selected in the ROD was monitored natural attenuation (MNA) with Institutional Controls (ICs). The ROD required ICs to prohibit drinking water wells and residential use of land in the affected area. The ROD specified the following remedial action objectives (RAOs):
  - a. Prevent human ingestion of, inhalation of, or direct contact with ground water at levels exceeding MCLs for F (4 mg/L), Cd (0.005 mg/L), Se (0.05 mg/L), and NO-3 (44 mg/L), or risk-based concentrations for manganese (0.18 mg/L);
  - b. Prevent external exposure to radionuclides in soils at levels that pose cumulative estimated risks above 3 x 10 -4. Such risks correspond to a radium-226 concentration in soils of 3.7 pCi/g and a radiation effective dose equivalent of approximately 15 mrem/year and for the radionuclides of concern at this Site;
  - c. Prevent ingestion or inhalation of soils containing radionuclides at levels that pose cumulative estimated excess risks above  $3 \times 10$ -4, or metals (arsenic = 21 mg/kg, beryllium = 8 mg/kg) at levels that pose cumulative estimated excess carcinogenic risks that exceed  $1 \times 10$ -5, a non-cancer risk HQ of 1, or Site-specific background levels where that is not practicable;

The rationale for selecting MNA for groundwater was that it would "allow for unrestricted use and exposure within 30 years" according to model predictions from the RI/FS and was based, in part, on EPA's understanding that "plant operations essentially captured the [known] plume (pumping of production wells for non-contact cooling water create[d] a cone of depression which

Pharmacia LLC's attorney in fact for any Site-related liabilities. Since 2018, P4 and Monsanto Company have been wholly owned subsidiaries of Bayer AG, a German stock corporation. EPA and IDEQ have not verified the substance of this footnote and do not attest to the veracity or accuracy of same.

[controlled] the spread of contaminants and also pump[ed] contamination out . . .)."<sup>2</sup>. The ROD also stated that the "ultimate goal of the remedy is to ensure that groundwater contamination sources have been eliminated." However, no further action was the selected remedy for source piles and materials within the Plant "because Monsanto's past actions, ongoing engineering and Institutional Controls and compliance with federal and state (environmental and worker health and safety) regulations ha[d] reduced potential sources of worker exposure and contaminant migration to surrounding soils to acceptable levels under current industrial land use."<sup>3</sup>. No further action was also the selected remedy for air, surface water, and Soda Creek sediments "because no significant health concerns or environmental impacts were found related to those media."<sup>4</sup>

- 17. The ROD documented releases of selenium, cadmium, fluoride, manganese, and nitrate at elevated concentrations above risk-based criteria in site groundwater.
- 18. A Consent Decree was entered by the United States, Respondent, and the Monsanto Company<sup>5</sup> in Idaho District Court on June 29, 1998, under which Respondent agreed to implement the ROD. EPA has since conducted 4 Five-Year Reviews, the most recent in 2018.
- 19. Paragraph 18 of the 1998 Consent Decree states that "if EPA determines, at any time, that the Remedial Action is not protective of human health and the environment, EPA may select further response actions for the Site in accordance with the requirements of CERCLA and the NCP."
- 20. In section 2.1.3.a of the 1998 Consent Decree Statement of Work, the Parties agreed that "[i]f groundwater recovery appears to significantly differ from RI/FS model projections, the model and the need for additional groundwater remedial actions should be reevaluated."
- 21. In the Second Five-Year Review Report ("FYR") (August 2008), EPA was unable to make a determination about the protectiveness of the MNA remedy and required<sup>6</sup> the following: collection of additional information about selenium levels in downgradient surface water, surface water characteristics and aquatic life to evaluate the applicability and impact of the State of Idaho's water quality standard for selenium and what changes, if any, were required to the cleanup goals and/or the selected remedy; as well as further evaluation of the ability of the groundwater remedy to address the selenium in surface water in a reasonable timeframe, to

<sup>&</sup>lt;sup>2</sup> See EPA Superfund Record of Decision: Monsanto Chemical Co. (Soda Springs Plant), EPA/ROD/R10-97/049 at Part II.7 (Apr. 30, 1997).

<sup>&</sup>lt;sup>3</sup> *Id.* at II.9.

<sup>&</sup>lt;sup>4</sup> *Id*.

<sup>&</sup>lt;sup>5</sup> See supra n.1.

<sup>&</sup>lt;sup>6</sup> Under EPA's authority set forth in the 1998 Consent Decree for this Site (*see, e.g.*, ¶¶ 14.a, 17, 18 & 20), each of the actions were identified as "recommendations" and "follow-up actions" in the Second, Third, and Fourth FYRs and were required of Respondent with EPA oversight. *See, e.g.*, U.S. EPA Region 10, Five-Year Review Report − Second Five-Year Review Report for Monsanto Chemical Co. (Soda Springs Plant), Part 9 at 35 (Aug. 2008).

identify and evaluate other remedial alternatives, and identify options to provide protectiveness in the interim.<sup>7</sup>

- 22. In response to the EPA's requirements for additional information to evaluate the effectiveness of the MNA remedy, Respondent undertook the following actions:
  - a. Continued annual monitoring of springs and surface water in Mormon Creek and Soda Creek;
  - b. Prepared a groundwater and surface water sampling and analysis plan in April 2010 to include Plant production wells, monitoring wells, and surface water/springs;
  - c. Added five new surface water sampling stations in May 2010 to evaluate surface water quality in Soda Creek downstream of the Site;
  - d. Added three surface water sampling stations in May 2011 to evaluate surface water quality in Soda Creek all the way to US Highway 30, near Alexander Reservoir;
  - e. Installed downgradient monitoring wells TW-63 through TW-70 in 2011 to better understand the relationship between groundwater and the springs that feed Mormon and Soda Creeks; and
    - f. Conducted Phase I of a Source Area Characterization in 2012.8
- 23. EPA's Third FYR (September 2013) concluded that no changes to cleanup goals or selected remedy were needed. In addition, the outcome of the data collection and evaluation in Paragraph 23 above were noted as follows:
  - a. In 2012, selenium concentrations in Soda Creek downstream from the Site and downstream from the flow-diverted reach were below the Idaho surface water standard;
  - b. Because the flow-diverted reach of Soda Creek is fed primarily by springs that discharge impacted groundwater, a remedy revision via an Explanation of Significant Differences ("ESD") or ROD amendment for groundwater that reduces selenium to acceptable levels should improve surface water quality in the flow-impaired reach of Soda Creek;

<sup>&</sup>lt;sup>7</sup> *Id*.

<sup>&</sup>lt;sup>8</sup> CH2MHill, Third Five-Year Review Report for Monsanto Chemical Co. (Soda Springs Phosphorus Plant), Table 3 at 14 (Sept. 2013).

<sup>&</sup>lt;sup>9</sup> *Id*.

- c. The new wells indicated expanded contaminant plumes and selenium concentrations above the RGs migrating past the Site southern boundary; and
- d. Phase I of a Source Area Characterization concluded that sources of contaminants remain on site. 10
- 24. In the Third FYR (September 2013), EPA determined that the MNA remedy was currently not protective because concentrations of COCs in groundwater remain above MCLs and RGs, contaminated groundwater plumes above the MCLs and RGs extended beyond the IC boundaries, the contamination in groundwater plumes had not been fully characterized, which posed risks to domestic wells downgradient of the Site, monitoring trends indicated that the groundwater performance standards will not be met in the foreseeable future, contaminated groundwater appeared to be impacting surface water and sediment in nearby creeks, and sources at the Site were potentially contributing to groundwater contamination. <sup>11</sup> EPA recommended the following actions in the Third FYR:
  - a. Define the full nature and extent of groundwater contamination by identified COCs by implementing a supplemental focused Remedial Investigation ("SRI");
  - b. When the SRI is completed, execute a supplemental focused Feasibility Study ("FFS") to evaluate the current remedy and the need to add additional remedial actions to achieve RAOs. If necessary, execute a ROD amendment or ESD to achieve RAOs;
  - c. Continue monitoring groundwater and surface water annually to observe changes in COC concentrations;
  - d. Conduct the next phase of the Source Characterization to evaluate current sources and update the conceptual site model to evaluate if current remedies are appropriate;
  - e. Continue monitoring Soda Creek sediments to compare results against new sampling protocol and determine if remedial action may be needed;
  - f. Investigate current usage of registered/unregistered domestic wells downgradient of the Site and the relationship to the fully defined groundwater plume(s); and
  - g. Develop an institutional control (IC) plan for areas where groundwater COCs have migrated beyond the current IC boundary. 12

<sup>&</sup>lt;sup>10</sup> *Id.* at 14-15.

<sup>&</sup>lt;sup>11</sup> *Id.* at 41.

<sup>&</sup>lt;sup>12</sup> Id. at 39-40

- 25. EPA's Fourth FYR (September 2018) described the status of implementation of the data collection and outcome of the evaluation required by the Third FYR (as summarized in Paragraph 25 above) as follows:
  - a. Focused RI/FFS in progress through 2018:
  - (1) Installation of monitoring wells at southwestern property line in 2018 to define the full southwestern extent of the UBZ-1/2 selenium plume;
  - (2) Conducting pumping tests and treatability pilot studies in 2017 and 2018 to evaluate the capture of the UBZ-1/2 selenium plume near the plant boundary and selenium removal from pumped groundwater, which tests and studies were anticipated to continue;
  - (3) Installation of monitoring wells in 2018 to evaluate groundwater COCs in UBZ-3 and UBZ-4 and assessment of the Plant production wells to capture the UBZ-4 plume;
  - (4) Evaluation of data for a draft Remedial Investigation Report and submittal of the same to EPA;<sup>13</sup>
  - (5) Conducted an offsite well survey and located four domestic wells and one spring in a residential basement. Sample results from these wells and springs indicated that concentrations of all constituents of concern were below the respective Site remediation goals; and
    - (6) Progress was not made on the IC plan.
  - b. Potential sources in UBZ-2 were investigated during 2013 through 2015 by installing monitoring wells, excavating test pits, and conducting leaching and mobility analyses. <sup>14</sup> The investigation resulted in an improved understanding of the fate and transport of COCs, but also identified additional uncertainty about constituent source(s) and their fate and transport. Respondent updated the CSM, which indicated that the assumptions made in the current remedy are not appropriate. <sup>15</sup> Data collected from the investigation call into question whether the remedy is functioning as intended, including:
    - (1) The investigation revealed more than 40,000 tons of source materials estimated to remain in the Former UFS Ponds and Former Tailings Pond. The potential source areas are covered with crushed slag and other permeable materials that allow infiltrated precipitation to flow vertically

<sup>&</sup>lt;sup>13</sup> CH2M, Fourth Five-Year Review Report for Monsanto Chemical Co. (Soda Springs Phosphorus Plant) Superfund Site, Caribou County, Idaho, Table 4 at 11 (Sept. 2018).

<sup>&</sup>lt;sup>15</sup> Golder Associates, Inc. (Golder). 2016. Phase II UBZ-1 Source Area Characterization, Monsanto Soda Springs, Idaho Plant.

downward and reach the groundwater aquifer; thus contributing to ongoing contamination in groundwater.

- c. Sediment sampling in Soda Creek has been conducted every 5 years as part of the FYRs. <sup>16</sup> For the fourth FYR, sediment sampling was performed in July 2017. <sup>17</sup> A third set of sediment data will be collected in 2022, after which trends in concentrations may be observed. <sup>18</sup>
- 26. In the Fourth FYR, EPA reiterated that uncertainties in the CSM had been identified in 2016. <sup>19</sup> Data gaps were identified at the southwest property line along Government Dam Road where the selenium plume had not been completely delineated; and east and southeast of the Plant production wells, where the extent of groundwater capture and the relationship to the Kerr-McGee plume had not been fully characterized. <sup>20</sup> Monitoring wells were installed in 2018 to address these data gaps. <sup>21</sup> Other unknowns included the full extent and thickness of the UFS source materials remaining buried on site, the spatial distribution of precipitation infiltration, the source of elevated chloride that could result in increased cadmium leaching, the source of nitrate and manganese within the UBZ-2 area that results in groundwater concentrations above the RG, and the potential for COC transport downgradient of UBZ-4 outside control by the Plant production wells.
- 27. The Fourth FYR also concluded that the remedy was not protective<sup>22</sup> because concentrations of surface water in locations where groundwater discharges to several streams and creeks exceed Idaho Water Quality Standards; concentrations of COCs in groundwater exceed RGs beyond the Respondent's property boundary; the nature and extent of groundwater plume(s) of site related COCs are not well defined; and trends indicate that groundwater RGs will not be met in the 5- to 30-year time frame anticipated in the ROD.<sup>23</sup> EPA stated that a ROD amendment or ESD may be needed to achieve groundwater RAOs, as well as to add surface water RAOs, ARARs, and RGs, and recommended Respondent undertake the following actions:
  - a. Complete the SRI and execute a FFS to evaluate the current remedy and the need to add additional remedial actions to achieve RAOs;
  - b. Continue monitoring groundwater annually to observe changes in COC concentrations;
  - c. Develop an IC plan for areas where groundwater COCs have migrated beyond current property boundary. Enact enforceable restrictions on groundwater use

<sup>17</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> *Id*.

<sup>&</sup>lt;sup>18</sup> *Id*.

<sup>&</sup>lt;sup>19</sup> *Id.* at 23.

<sup>10.</sup> at 2.

<sup>&</sup>lt;sup>20</sup> *Id*.

<sup>&</sup>lt;sup>21</sup> *Id*.

<sup>&</sup>lt;sup>22</sup> *Id.* at 10.

<sup>&</sup>lt;sup>23</sup> *Id.* at 25.

beyond southern property boundary to prevent exposure where plume has migrated to Soda Springs;

- d. Fully define the extent of remaining on-site sources and address leaching of COCs into groundwater;
- e. Continue monitoring Soda Creek sediments every five years and consider whether remedial action is necessary to address ecological risks due to elevated contaminant concentrations in sediments;
  - f. Continue monitoring surface water annually; and
- g. Execute the recommendations from the SRI and 2016 Source Area Characterization report to fully characterize source materials, COC transport mechanism, evaluate chloride, nitrate and manganese sources, and evaluate water quality data from wells installed in 2018.<sup>24</sup>
- 28. In response to the recommendations and follow-up actions required of Respondent in the Second, Third, and Fourth FYRs and in cooperation with EPA and IDEQ, Respondent has undertaken the following activities:
  - a. Beginning in 2011 and continuing through 2018, expanded the groundwater monitoring well network and conducted extensive monitoring to define the nature and extent of groundwater contamination by identified COCs and better understand the relationship between groundwater and springs that feed Mormon Creek and Soda Creek;
  - b. Conducted Phase I and Phase II of a Source Area Characterization for Upper Basalt Zone ("UBZ") aquifer 2 as part of the effort to identify sources of COCs that could be affecting the MNA remedy and to update the CSM for the Site;
    - c. In 2014, initiated a selenium treatment technology screening;
  - d. In 2015, completed an offsite well survey and located four domestic wells and one spring in a residential basement, none of which were used for drinking water and had COCs above the respective remediation goals;
    - e. In 2016 and 2017, conducted selenium treatment pilot tests;
  - f. Beginning in 2016, conducted single well pumping tests and treatability pilot studies to evaluate capture of the UBZ-1 and UBZ-2 selenium plume near the plant's southern boundary and selenium removal from pumped groundwater;

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<sup>&</sup>lt;sup>24</sup> *Id.* at 25-26.

- g. In July 2017, started an extended pumping test (currently in Year 4) using three pump- back wells (TW-58, TW-80 and TW-83) to evaluate the hydraulic and groundwater quality characteristics of the southern Plant area and to determine the effectiveness of the wells to capture the selenium plume;
- h. In 2016-2018, developed a groundwater flow model that has been used to analyze the site hydrogeology and to evaluate and design the UBZ-1 & UBZ-2 plume pumping system;
- i. Installed additional monitoring wells at the southwestern property line in 2018 to define the full southwestern extent of the selenium plume;
- j. In 2018, installed monitoring wells in UBZ-3 and UBZ-4 to evaluate groundwater capture by the Plant production wells and potential molybdenum plume migration into UBZ-3 from the Kerr McGee Site;
- k. In 2018, prepared a pilot test technology comparison report and a selenium treatment demonstration plant test plan;
- l. Designed and began construction of a selenium demonstration water treatment plant which will have a capacity of approximately 400 gallons per minute from three pump-back wells.
- 29. Since 2019, Respondent has effected significant and consistent capture of the UBZ-1 and UBZ-2 groundwater plume via the long-term pump testing and evaporative use of pumped water in the plant. Respondent has designed and continues construction of a demonstration selenium treatment system that is projected for start-up in the first quarter of 2021. Implementation of long-term groundwater extraction is expected to prevent or minimize migration of the contaminant plume to the south of the plant and to the seeps, springs, and surface water in the vicinity of Soda Creek. The demonstration selenium treatment system is a scaled-up version of a bench-scale treatability study which achieved >95% selenium reduction in the treated water. Treatability studies will continue to evaluate the treatment technology at full-scale.
- 30. The Agency for Toxic Substances and Disease Registry (ATSDR) provides toxicological profiles for toxic substances. These profiles include information on health effects. For selenium, the ATSDR says that long-term ingestion of excessive amounts of selenium can result in selenosis, which causes a loss of feeling and control in arms and legs. ATSDR lists cadmium as a known human carcinogen. Other health effects from long-term cadmium exposure to adults and children include possible kidney disease, lung damage, and fragile bones.
- 31. The Site was listed on the National Priorities List (NPL) by EPA pursuant to Section 105 CERCLA, 42 U.S.C. § 9605, on August 30, 1990 (55 Fed. Reg. 35502).

## VI. CONCLUSIONS OF LAW AND DETERMINATIONS

- 32. Based on the Findings of Fact set forth above, and the administrative record, EPA has determined that:
- a. The Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).
- b. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).
- c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).
- d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). Respondent is the "owner" and/or "operator" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).
- e. The conditions described in Paragraphs 10-31 of the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22). The remedy selected in the 1997 ROD will not meet RGs within the 30-year timeframe anticipated at the time it was issued.
- f. The actions required by this Settlement are necessary to protect the public health, welfare, or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and EPHA, and HWMA, if approved by IDEQ, and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).
- g. EPA has determined that Respondent is qualified to conduct the SRI/FFS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondent complies with the terms of this Settlement.

## VII. SETTLEMENT AGREEMENT AND ORDER

33. Based upon the Findings of Fact, Conclusions of Law and Determinations set forth above, and the administrative record, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement, including, but not limited to, all appendices to this Settlement and all documents incorporated by reference into this Settlement.

## VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

- Selection of Contractors, Personnel. All Work performed under this Settlement shall be under the direction and supervision of qualified personnel. As of the effective date, Respondent has retained and EPA and IDEQ have approved Golder Associates as the primary contractor to perform Work under this Settlement. If, after the commencement of Work, Respondents retain additional contractors or subcontractors, Respondents shall notify EPA of the names, titles, contact information, and qualifications of such contractors or subcontractors retained to perform the Work at least 30 days prior to commencement of Work by such additional contractors or subcontractors. EPA retains the right, at any time, to disapprove of any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves of a selected contractor or subcontractor, Respondent shall retain a different contractor or subcontractor and shall notify EPA of that contractor's or subcontractor's name, title, contact information, and qualifications within 14 days after EPA's disapproval. With respect to any proposed contractor, Respondent shall demonstrate that the proposed contractor demonstrates compliance with ASQ/ANSI E4:2014 "Quality management systems for environmental information and technology programs – Requirements with guidance for use" (American Society for Quality, February 2014), by submitting a copy of the proposed contractor's Quality Management Plan (QMP). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," EPA/240/B-01/002 (Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondent shall be subject to EPA's review for verification based on objective assessment criteria (e.g., experience, capacity, technical expertise) and a determination that it does not have a conflict of interest with respect to the project.
- 35. Respondent has designated, and EPA has not disapproved, the following individual as Project Coordinator, who shall be responsible for administration of all actions by Respondent required by this Settlement: Jason Maughan, Lead Environmental Engineer, Bayer U.S. Crop Science, 1853 Hwy 34, Soda Springs, ID 83276, (208)547-1239, jason.maughan@bayer.com. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during the Work. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, title, contact information, and qualifications within 14 days following EPA's disapproval. Notice or communication relating to this Settlement from EPA to Respondent's Project Coordinator shall constitute notice or communication to Respondent.
- 36. EPA has designated Lynne Hood of the Superfund and Emergency Management Division, Region 10, as its Remedial Project Manager (RPM). EPA will notify Respondent of a change of its designated RPM. Communications between Respondent and EPA, and all documents concerning the activities performed pursuant to this Settlement, shall be directed to the EPA RPM in accordance with Paragraph 46.a. All deliverables, notices, notifications, proposals, reports, and requests specified in this Settlement must be in writing, unless otherwise specified, and be submitted by email to Lynne Hood at <a href="https://document.new.org/hood.lynne@epa.gov">hood.lynne@epa.gov</a>. EPA and Respondent shall have the right to change its respective designated RPM or Project Coordinator.

Respondent shall notify EPA thirty (30) days before such a change is made. The initial notification by Respondent may be made orally, but shall be promptly followed by a written notice.

37. EPA's RPM shall have the authority lawfully vested in an RPM and On-Scene Coordinator (OSC) by the NCP. In addition, EPA's RPM shall have the authority, consistent with the NCP, to halt, conduct, or direct any Work required by this Settlement, or to direct any other response action when s/he determines that conditions at the Site constitute an emergency situation or present an immediate threat to public health or welfare or the environment. Absence of the EPA RPM from the area under study pursuant to this Settlement shall not be cause for stoppage or delay of Work unless specifically directed by the RPM.

#### IX. WORK TO BE PERFORMED

- 38. For any regulation or guidance referenced in the Settlement, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after Respondent receives notification from EPA of the modification, amendment, or replacement.
- Respondent shall complete the SRI/FFS and prepare all plans in accordance with the provisions of this Settlement, the attached SOW, CERCLA, the NCP, and EPA guidance, including, but not limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" ("RI/FS Guidance"), OSWER Directive # 9355.3-01 (October 1988), available at https://semspub.epa.gov/src/document/11/128301, "Guidance for Data Useability in Risk Assessment (Part A), Final," OSWER Directive #9285.7-09A, PB 92-963356 (April 1992), available at http://semspub.epa.gov/src/document/11/156756, and guidance referenced therein, and guidance referenced in the SOW. The Supplemental Remedial Investigation (SRI) shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. To the extent that any Work required by this Settlement has been performed to EPA's satisfaction by Respondent's prior groundwater and surface water monitoring, modelling, and data analysis conducted in response to the recommendations in EPA's Third and Fourth Five-Year Reviews for the Site and EPA's authority to require the same under the 1997 Consent Decree as noted in Part V of this Settlement and identified in the SOW, Respondent shall not be required to duplicate such Work. The Focused Feasibility Study (FFS) shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site. The alternatives evaluated must include, but shall not be limited to, the range of technology alternatives described in the NCP, 40 C.F.R. § 300.430(e), and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable and may include the strategies described in "Presumptive Response Strategy and Ex-Situ Treatment Technologies for

Contaminated Groundwater at CERCLA Sites" OSWER 9283.1-12, EPA 540-R-96-023 (Oct. 1996). In evaluating the technology alternatives, Respondent shall address the site-specific factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and 40 C.F.R. § 300.430(e).

- 40. All written documents prepared by Respondent pursuant to this Settlement shall be submitted by Respondent in accordance with Section X (Submission and Approval of Deliverables). With the exception of progress reports and the Health and Safety Plan, all such submittals will be reviewed and after consultation with IDEQ, approved by EPA in accordance with Section X (Submission and Approval of Deliverables). Respondent shall implement all EPA approved, conditionally approved, or modified deliverables.
- 41. Upon receipt of the draft Focused Feasibility Study Report ("FFS Report"), EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the cost, implementability, and long-term effectiveness of any proposed ICs for that alternative.

## 42. Modification of the SRI/FFS Work Plan

- a. If at any time during the SRI/FFS process, Respondent identifies a need for additional data, Respondent shall submit a memorandum documenting the need for additional data to EPA's RPM within 30 days after identification. EPA in its discretion will determine whether the additional data will be collected by Respondent and whether it will be incorporated into deliverables.
- b. In the event of unanticipated or changed circumstances at the Site, Respondent shall notify EPA's RPM by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In the event that EPA determines that the unanticipated or changed circumstances warrant changes in the SRI/FFS Work Plan, EPA, after consultation with IDEQ, shall modify the SRI/FFS Work Plan in writing accordingly or direct Respondent to modify and submit the modified SRI/FFS Work Plan to EPA for approval. Respondent shall perform the SRI/FFS Work Plan as modified.
- c. EPA, after consultation with IDEQ, may determine that, in addition to tasks defined in the initially approved SRI/FFS Work Plan, other additional work may be necessary to accomplish the objectives of the SRI/FFS. Respondent shall perform these response actions in addition to those required by the initially approved SRI/FFS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a thorough SRI/FFS.
- d. Respondent shall confirm its willingness to perform the additional work in writing to EPA within 7 days after receipt of the EPA request. If Respondent objects to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondent may seek dispute resolution pursuant to Section XVIII (Dispute Resolution). The SOW and/or SRI/FFS Work Plan shall be modified in accordance with the final resolution of the dispute.

- e. Respondent shall complete the additional work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the SRI/FFS Work Plan or written SRI/FFS Work Plan supplement. EPA reserves the right to conduct the work itself, to seek reimbursement from Respondent for the costs incurred in performing the work, and/or to seek any other appropriate relief.
- f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.

## 43. Off-Site Shipments

- a. Respondent may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent will be deemed to be in compliance with Section 121(d)(3) of CERCLA and 40 C.F.R. § 300.440 regarding a shipment if Respondent obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).
- b. Respondent may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, it provides written notice to the appropriate state environmental official in the receiving facility's state and to EPA's RPM. This notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondent shall also notify the state environmental official referenced above and EPA's RPM of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondent shall provide the written notice after the award of the contract for the SRI/FFS and before the Waste Material is shipped.
- c. Respondent may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if it complies with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the SOW. Wastes shipped off-Site to a laboratory for characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-Site for treatability studies, are not subject to 40 C.F.R. § 300.440.
- 44. **Meetings**. Respondent shall make presentations at, and participate in, meetings at the request of EPA during the preparation of the SRI/FFS. In addition to discussion of the technical aspects of the SRI/FFS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.
- 45. **Progress Reports**. In addition to the deliverables set forth in this Settlement, Respondent shall submit written monthly progress reports to EPA by the 15th day of the

following month. At a minimum, with respect to the preceding month, these progress reports shall:

- a. describe the actions that have been taken to comply with this Settlement;
- b. include all results of sampling and tests and all other data received by Respondent;
- c. describe Work planned for the next two months with schedules relating such Work to the overall project schedule for SRI/FFS completion; and
- d. describe all problems encountered in complying with the requirements of this Settlement and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

## X. SUBMISSION AND APPROVAL OF DELIVERABLES

## 46. **Submission of Deliverables**

## a. General Requirements for Deliverables

(1) Except as otherwise provided in this Settlement, Respondent shall direct all submissions required by this Settlement to EPA's RPM at:

Lynne Hood EPA Region 10 – Idaho Operations Office 950 W Bannock St, Suite 900 Boise, Idaho 83702

By email to hood.lynne@epa.gov or by telephone at (509) 376-8631.

## and to the State at:

Stan Christensen Idaho Department of Environmental Quality 444 Hospital Way, #300 Pocatello, Idaho 83201 Phone: (208) 236-6160

Email: Stan Christenson @do.

Email: Stan.Christensen@deq.idaho.gov

Respondent shall submit all deliverables required by this Settlement, the attached SOW, or any approved work plan in accordance with the schedule set forth in such plan.

(2) Respondent shall submit all deliverables in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in Paragraph 46.b. All other deliverables shall be submitted in the electronic form specified by EPA's RPM. If any deliverable includes maps, drawings, or other exhibits that are larger than 8.5 x 11 inches, Respondent shall also provide paper copies of such exhibits. If EPA or IDEQ requests, Respondent shall provide paper copies of any deliverable.

## b. Technical Specifications for Deliverables

- (1) Sampling and monitoring data should be submitted in standard regional Electronic Data Deliverable (EDD) format, generally following the most current Region 10 Superfund Electronic Data Submission guidelines. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.
- (2) Spatial data, including spatially-referenced data and geospatial data, should be submitted: (i) in the ESRI File Geodatabase format; and (ii) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions should include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data should be accompanied by metadata, and such metadata should be compliant with the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata Editor (EME), complies with these FGDC and EPA metadata requirements and is available at <a href="https://edg.epa.gov/EME/">https://edg.epa.gov/EME/</a>.
- (3) Each file must include an attribute name for each site unit or subunit submitted. Consult <a href="https://www.epa.gov/geospatial/geospatial-policies-and-standards">https://www.epa.gov/geospatial/geospatial-policies-and-standards</a> for any further available guidance on attribute identification and naming.
- (4) Spatial data submitted by Respondent does not, and is not intended to, define the boundaries of the Site.

# 47. Approval of Deliverables

## a. Initial Submissions

(1) After review by the Agencies of any deliverable that is required to be submitted for EPA approval under this Settlement or the attached SOW, EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission

upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing.

- (2) The Agencies also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.
- b. **Resubmissions**. Upon receipt of a notice of disapproval under Paragraph 47.a(1) (Initial Submissions), or if required by a notice of approval upon specified conditions under Paragraph 47.a(1), Respondent shall, within 14 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the deliverable for the Agencies' review and EPA approval. After Agencies' review of the resubmitted deliverable, EPA may: (a) approve, in whole or in part, the resubmission; (b) approve the resubmission upon specified conditions; (c) modify the resubmission; (d) disapprove, in whole or in part, the resubmission, requiring Respondents to correct the deficiencies; or (e) any combination of the foregoing.
- c. **Implementation**. Upon approval, approval upon conditions, or modification by EPA under Paragraph 47.a (Initial Submissions) or Paragraph 47.b (Resubmissions), of any deliverable, or any portion thereof: (i) such deliverable, or portion thereof, will be incorporated into and enforceable under the Settlement; and (ii) Respondent shall take any action required by such deliverable, or portion thereof. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for penalties under Section XXI (Stipulated Penalties) for violations of this Settlement.
- 48. Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA.
- 49. In the event that EPA takes over some of the tasks, but not the preparation of the Supplemental Remedial Investigation Report ("SRI Report") or the FFS Report, Respondent shall incorporate and integrate information supplied by EPA into those reports.
- 50. Respondent shall not proceed with any activities or tasks dependent on the following deliverables until receiving EPA approval, approval on condition, or modification of such deliverables: SRI/FFS Work Plan; Sampling and Analysis Plan; draft SRI Report; Treatability Testing Work Plan; Treatability Testing Sampling and Analysis Plan; Treatability Testing Health and Safety Plan; and draft FFS Report. While awaiting EPA approval, approval on condition, or modification of these deliverables, Respondent shall proceed with all other tasks and activities that may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement.

- 51. For all remaining deliverables not listed in Paragraph 50, Respondent shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval of the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the Work.
- 52. **Material Defects**. If an initially submitted or resubmitted plan, report, or other deliverable contains a material defect, and the plan, report, or other deliverable is disapproved or modified by EPA under Paragraph 47.a (Initial Submissions) or 47.b (Resubmissions) due to such material defect, Respondent shall be deemed in violation of this Settlement for failure to submit such plan, report, or other deliverable timely and adequately. Respondent may be subject to penalties for such violation as provided in Section XXI (Stipulated Penalties).
- 53. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA.

## XI. QUALITY ASSURANCE, SAMPLING, AND DATA ANALYSIS

54. Respondent shall use quality assurance, quality control, and other technical activities and chain of custody procedures for all samples consistent with "EPA Requirements for Quality Assurance Project Plans (QA/R5)," EPA/240/B-01/003 (March 2001, reissued May 2006), "Guidance for Quality Assurance Project Plans (QA/G-5)," EPA/240/R-02/009 (December 2002), and "Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A-900C (March 2005).

## 55. Laboratories

Respondent shall ensure that EPA and IDEQ personnel and their authorized representatives are allowed access at reasonable times to all laboratories utilized by Respondent pursuant to this Settlement. In addition, Respondent shall ensure that such laboratories shall analyze all samples submitted by EPA pursuant to the Quality Assurance Project Plan (QAPP) for quality assurance, quality control, and technical activities that will satisfy the stated performance criteria as specified in the QAPP and that sampling and field activities are conducted in accordance with the Agency's "EPA QA Field Activities Procedure" CIO 2105-P-02.1 (9/23/2014), available at https://www.epa.gov/irmpoli8/epa-qa-field-activitiesprocedures. Respondent shall ensure that the laboratories it utilizes for the analysis of samples taken pursuant to this Settlement meet the competency requirements set forth in EPA's "Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions," available at https://www.epa.gov/measurements/documents-about-measurement-competency-underacquisition-agreements, and that the laboratories perform all analyses using EPA-accepted methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA's Contract Laboratory Program (https://www.epa.gov/superfund/programs/clp/),

SW 846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (<a href="https://www.epa.gov/hw-sw846">https://www.epa.gov/hw-sw846</a>), "Standard Methods for the Examination of Water and Wastewater" (<a href="http://www.standardmethods.org/">http://www.standardmethods.org/</a>), and 40 C.F.R. Part 136, "Air Toxics - Monitoring Methods" (<a href="https://www.epa.gov/ttnamtil/airtox.html">https://www.epa.gov/ttnamtil/airtox.html</a>).

- b. Upon approval by EPA, and after consultation with IDEQ, Respondent may use other appropriate analytical methods, as long as (i) quality assurance/quality control (QA/QC) criteria are contained in the methods and the methods are included in the QAPP, (ii) the analytical methods are at least as stringent as the methods listed above, and (iii) the methods have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, ASTM, NIOSH, OSHA, etc.
- c. Respondent shall ensure that all laboratories it uses for analysis of samples taken pursuant to this Settlement have a documented Quality System that complies with ASQ/ANSI E4:2014 "Quality Management Systems for Environmental Information and Technology Programs Requirements With Guidance for Use" (American Society for Quality, February 2014), and "EPA Requirements for Quality Management Plans (QA/R-2)" EPA/240/B-01/002 (March 2001, reissued May 2006), or equivalent documentation as determined by EPA. EPA may consider Environmental Response Laboratory Network (ERLN) laboratories, laboratories accredited under the National Environmental Laboratory Accreditation Program (NELAP), or laboratories that meet International Standardization Organization (ISO 17025) standards or other nationally recognized programs as meeting the Quality System requirements.
- d. Respondent shall ensure that all field methodologies utilized in collecting samples for subsequent analysis pursuant to this Settlement are conducted in accordance with the procedures set forth in the approved QAPP.

# 56. **Sampling**

- a. Upon request, Respondent shall provide split or duplicate samples to EPA and IDEQ or their authorized representatives. Respondent shall notify EPA and IDEQ not less than 7 days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA and IDEQ shall have the right to take any additional samples that EPA or IDEQ deem necessary. Upon request, EPA and IDEQ shall provide Respondent split or duplicate samples of any samples they take as part of EPA's oversight of Respondent's implementation of the Work, and any such samples shall be analyzed in accordance with the approved QAPP.
- b. Respondent shall submit to EPA and IDEQ, in the next monthly progress report as described in Paragraph 45 (Progress Reports) the results of all sampling and/or tests or other data obtained or generated by or on behalf of Respondent with respect to the Site and/or the implementation of this Settlement.
- c. Respondent waives any objections to any data gathered, generated, or evaluated by EPA, IDEQ or Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control (QA/QC) procedures required by

the Settlement or any EPA-approved SRI/FFS Work Plans or Sampling and Analysis Plans. If Respondent objects to any other data relating to the SRI/FFS, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days after the monthly progress report containing the data.

## XII. PROPERTY REQUIREMENTS

- 57. Agreements Regarding Access and Non-Interference. Respondent shall, with respect to any Non-Settling Owner's Affected Property, use best efforts to secure from such Non-Settling Owner an agreement, enforceable by Respondent and the United States, providing that such Non-Settling Owner, and Owner Respondent shall, with respect to Owner Respondent's Affected Property: (i) provide EPA, IDEQ, and their representatives, contractors, and subcontractors with access at all reasonable times to such Affected Property to conduct any activity regarding the Settlement, including those listed in Paragraph 57.a (Access Requirements); and (ii) refrain from using such Affected Property in any manner that EPA determines will pose an unacceptable risk to human health or to the environment due to exposure to Waste Material, or interfere with or adversely affect the implementation or integrity of the Work.
  - a. **Access Requirements**. The following is a list of activities for which access is required regarding the Affected Property:
    - (1) Monitoring the Work;
    - (2) Verifying any data or information submitted to EPA or IDEQ;
    - (3) Conducting investigations regarding contamination at or near the Site;
      - (4) Obtaining samples;
    - (5) Assessing the need for, planning, implementing, or monitoring response actions;
    - (6) Assessing implementation of quality assurance and quality control practices as defined in the approved QAPP;
    - (7) Implementing the Work pursuant to the conditions set forth in Paragraph 105 (Work Takeover);
    - (8) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Respondent or its agents, consistent with Section XIII (Access to Information);

- (9) Assessing Respondent's compliance with the Settlement;
- (10) Determining whether the Affected Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted under the Settlement; and
- (11) Implementing, monitoring, maintaining, reporting on, and enforcing any land, water, or other resource use restrictions regarding the Affected Property.
- 58. **Best Efforts**. As used in this Section, "best efforts" means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money to secure access and/or use restriction agreements, as required by this Section. If Respondent is unable to accomplish what is required through "best efforts" in a timely manner, it shall notify EPA and include a description of the steps taken to comply with the requirements. If EPA deems it appropriate, it may assist Respondent, or take independent action, in obtaining such access and/or use restrictions. All costs incurred by the United States in providing such assistance or taking such action, including the cost of attorney time and the amount of monetary consideration or just compensation paid, constitute Future Response Costs to be reimbursed under Section XVII (Payment of Response Costs).
- 59. If EPA, after consultation with IDEQ, determines in a decision document prepared in accordance with the NCP that Institutional Controls in the form of state or local laws, regulations, ordinances, zoning restrictions, or other governmental controls or notices are needed, Respondent shall cooperate with IDEQ and EPA's efforts to secure and ensure compliance with such Institutional Controls.
- 60. In the event of any Transfer of the Affected Property, unless EPA otherwise consents in writing, Respondent shall continue to comply with its obligations under the Settlement, including its obligation to secure access and ensure compliance with any land, water, or other resource use restrictions regarding the Affected Property.
- 61. Notwithstanding any provision of the Settlement, EPA and IDEQ retain all of their access authorities and rights, as well as all of their rights to require land, water, or other resource use restrictions, including enforcement authorities related thereto under CERCLA, RCRA, HWMA, EPHA, and any other applicable statute or regulations.

#### XIII. ACCESS TO INFORMATION

62. Respondent shall provide to EPA and IDEQ, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within Respondent's possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement, including, but not limited to, sampling, analysis, chain of

custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Work. Respondent shall also make available to EPA and IDEQ, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

# 63. Privileged and Protected Claims

- a. Respondent may assert that all or part of a Record requested by EPA or IDEQ is privileged or protected as provided under federal law, in lieu of providing the Record, provided Respondent complies with Paragraph 63.b, and except as provided in Paragraph 63.c.
- b. If Respondent asserts a claim of privilege or protection, it shall provide EPA and IDEQ with the following information regarding such Record: its title; its date; the name, title, affiliation (e.g., company or firm), and address of the author, of each addressee, and of each recipient; a description of the Record's contents; and the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, Respondent shall provide the Record to EPA and IDEQ in redacted form to mask the privileged or protected portion only. Respondent shall retain all Records that it claims to be privileged or protected until EPA, after consultation with IDEQ has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Respondent's favor.
- c. Respondent may make no claim of privilege or protection regarding: (1) any data regarding the Site, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site; or (2) the portion of any Record that Respondent is required to create or generate pursuant to this Settlement.
- 64. **Business Confidential Claims**. Respondent may assert that all or part of a Record provided to EPA or IDEQ under this Section or Section XIV (Record Retention) is business confidential to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Respondent shall segregate and clearly identify all Records or parts thereof submitted under this Settlement for which Respondent asserts business confidentiality claims. Records claimed as confidential business information will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA and IDEQ, or if EPA has notified Respondent that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, or State law, the public may be given access to such Records without further notice to Respondent.
- 65. Notwithstanding any provision of this Settlement, EPA and IDEQ retain all of their information gathering and inspection authorities and rights, including enforcement actions related thereto, under CERCLA, RCRA, HWMA, EPHA and any other applicable statutes or regulations.

## XIV. RECORD RETENTION

- MXXI (Notice of Completion of Work), that all Work has been fully performed in accordance with this Settlement, Respondent shall preserve and retain all non-identical copies of Records (including Records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to its liability under CERCLA with regard to the Site, provided, however, that Respondent must retain, in addition, all Records that relate to the liability of any other person under CERCLA with respect to the Site. Respondent must also retain, and instruct its contractors and agents to preserve, for the same period of time specified above all non-identical copies of the last draft or final version of any Records (including Records in electronic form) now in its possession or control or that come into its possession or control that relate in any manner to the performance of the Work, provided, however, that Respondent (and its contractors and agents) must retain, in addition, copies of all data generated during the performance of the Work and not contained in the aforementioned Records required to be retained. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.
- 67. At the conclusion of the document retention period, Respondent shall notify EPA and IDEQ at least 90 days prior to the destruction of any such Records, and, upon request by EPA, and except as provided in Paragraph 63 (Privileged and Protected Claims), Respondent shall deliver any such Records to EPA.
- 68. Respondent certifies that, to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or IDEQ and that it has fully complied with any and all EPA and IDEQ requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927, and state law.

## XV. COMPLIANCE WITH OTHER LAWS

69. Nothing in this Settlement limits Respondent's obligations to comply with the requirements of all applicable state and federal laws and regulations, except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 9621(e), and 40 C.F.R. §§ 300.400(e), when performing the SRI/FFS. No local, state, or federal permit shall be required for any portion of the Work conducted entirely on-site (i.e., within the areal extent of contamination or in very close proximity to the contamination and necessary for implementation of the Work), including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work that is not on-site requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. Respondent may seek relief under the provisions of Section XX (Force Majeure) for any delay in the performance

of the Work resulting from a failure to obtain, or a delay in obtaining, any permit or approval required for the Work, provided that it has submitted timely and complete applications and taken all other actions necessary to obtain all such permits or approvals. This Settlement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

## XVI. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

- 70. **Emergency Response**. If any event occurs during performance of the Work that causes or threatens a release of Waste Material related to the Work that either constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action to prevent, abate, or minimize such release or threat of release. Respondent shall take these actions in accordance with all applicable provisions of this Settlement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify EPA's RPM or, in the event of his/her unavailability, the Regional Duty Officer at 1-800-424-4372 of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA for all costs of such response action not inconsistent with the NCP pursuant to Section XVII (Payment of Response Costs).
- 71. **Release Reporting**. In the event of any release of a hazardous substance related to the Work that Respondent is required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, Respondent shall follow the Idaho Hazardous Materials/WMD Incident Command and Response Support Plan and call 1-800-632-800. Respondent then shall orally notify EPA's RPM or, in the event of his/her unavailability, the Regional Duty Officer at 1-800-424-4372, and the National Response Center at (800) 424-8802. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, and any release reporting requirements under state law including, but not limited to, the Idaho Hazardous Waste Management Act, I.C. § 39-4401, *et. seq.*, Rules and Standards for Hazardous Waste, IDAPA 58.01.05, and Idaho Water Quality Standards, IDAPA 58.01.02.
- 72. For any event covered under this Section, Respondent shall submit a written report to EPA within 7 days after the onset of such event, setting forth the action or event that occurred and the measures taken, and to be taken, to mitigate any release or threat of release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release or threat of release.

## XVII. PAYMENT OF EPA RESPONSE COSTS

- 73. **Payments for Future Response Costs**. Respondent shall pay to EPA all Future Response Costs not inconsistent with the NCP.
- a. Respondent shall make payment to EPA by Fedwire Electronic Funds Transfer (EFT) to:

Federal Reserve Bank of New York

ABA = 021030004

Account = 68010727

SWIFT address = FRNYUS33

33 Liberty Street

New York, NY 10045

Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number 10D4 and the EPA docket number for this action.

b. At the time of payment, Respondent shall send notice that payment has been made to:

Lynne Hood EPA Region 10 – Idaho Operations Office 950 W Bannock St, Suite 900 Boise, Idaho 83702

and to the EPA Cincinnati Finance Office by email at cinwd\_acctsreceivable@epa.gov, or by mail to

EPA Cincinnati Finance Office 26 W. Martin Luther King Drive Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number 10D4 and the EPA docket number for this action.

c. **Periodic Bill**. On a periodic basis and at least annually, EPA will send Respondent a bill requiring payment that includes a SCORPIOS cost summary which includes direct and indirect costs incurred by EPA, its contractors, subcontractors, and the United States Department of Justice. Respondent shall make all payments within 30 days after Respondent's receipt of each bill requiring payment, except as otherwise provided in Paragraph 75 (Contesting Future Response Costs), and in accordance with Paragraphs 73.a (Payment for Future Response Costs).

- d. **Deposit of Future Response Costs Payments**. The total amount to be paid by Respondent pursuant to Paragraph 73.c (Periodic Bill) shall be deposited by EPA in the Monsanto Superfund Site Special Account to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund, provided, however, that EPA may deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund if, at the time the payment is received, EPA estimates that the Monsanto Superfund Site Special Account balance is sufficient to address currently anticipated future response actions to be conducted or financed by EPA at or in connection with the Site. Any decision by EPA to deposit a Future Response Costs payment directly into the EPA Hazardous Substance Superfund for this reason shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement or in any other forum.
- 74. **Interest**. In the event that any payment for Future Response Costs is not made by the date required, Respondent shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill. The Interest shall accrue through the date of Respondent's payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XXI (Stipulated Penalties).
- Contesting Future Response Costs. Respondent may initiate the procedures of 75. Section XVIII (Dispute Resolution) regarding payment of any Future Response Costs billed under Paragraph 73 (Payments for Future Response Costs) if it determines that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. To initiate such a dispute, Respondent shall submit a Notice of Dispute in writing to EPA's RPM within 30 days after receipt of the bill. Any such Notice of Dispute shall specifically identify the contested Future Response Costs and the basis for objection. If Respondent submit a Notice of Dispute, Respondent shall within the 30-day period, also as a requirement for initiating the dispute, (a) pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 73, and (b) establish, in a duly chartered bank or trust company, an interest-bearing escrow account that is insured by the Federal Deposit Insurance Corporation (FDIC) and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to EPA's RPM a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. If EPA prevails in the dispute, within 5 days after the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 73. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which it did not prevail to EPA in the manner described in Paragraph 73. Respondent shall be

disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVIII (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

76. **Payment of EPA Other Response Costs.** Notwithstanding any other provision of this Settlement, Respondent remains obligated to pay EPA response costs provided for in the 1997 Consent Decree, including interest and penalties, to the extent not reimbursed under this Settlement.

#### XVIII. REIMBURSEMENT OF STATE COSTS

- 77. State Response Costs incurred by IDEQ with respect to the Site under this Settlement will be reimbursed in the following manner:
- a. As an initial deposit, Respondents will pay the sum of ten thousand Dollars (\$10,000) to be deposited to an account established for this Site.
- b. Thereafter, IDEQ shall provide a quarterly accounting and invoice to Respondent of Costs incurred by IDEQ in relation to this Settlement. "Costs" subject to reimbursement under this Paragraph shall mean all direct or indirect costs incurred by IDEQ in connection with IDEQ's support of Work performed by or on behalf of IDEQ under this Settlement, as set forth and described in the SOW, or for Work performed prior to this Settlement but used in support thereof, including but not limited to: reasonable time and travel costs associated with oversight of the Work performed under the SOW; IDEQ's contractor costs; compliance monitoring, including the collection and analysis of split samples; Site visits; review and approval or disapproval of reports; reasonable overhead charges and any other costs directly or indirectly incurred in overseeing this Settlement.
- c. Within thirty (30) days of Respondent's receipt of IDEQ's quarterly accounting invoice, Respondent shall reimburse the State for all costs reflected in the accounting invoice.
- d. The initial deposit will be returned to Respondents within sixty (60) days of the date IDEQ incurs final response costs.
  - 78. All payments to IDEQ shall be made to:

Administrative Services-Accounts Receivable Idaho Department of Environmental Quality 1410 N. Hilton Boise, ID 83706-1255

Respondent may dispute payment of any portion of IDEQ's submitted costs, but only on the basis of accounting errors, the inclusion of costs outside the scope of this Settlement, the inclusion of

costs inconsistent with State regulations or the inclusion of costs that have not been paid or approved for payment by IDEQ. Disputes regarding oversight costs will be resolved using the dispute resolution procedures described in Section XIX. Any objection by Respondent shall be made in writing within forty-five (45) days of receipt of the Quarterly Billing and shall specifically identify the disputed costs and the basis of the dispute. All undisputed costs shall be remitted by Respondent in accordance with the provisions in the preceding paragraphs of this Section. In any dispute resolution proceeding, Respondent shall bear the burden of establishing its contentions as to inappropriate costs. If IDEQ prevails in the dispute resolution proceeding, Respondent shall remit the amount(s) in question, including any applicable interest, within thirty (30) days after receipt of the final determination.

## XIX. DISPUTE RESOLUTION

79. Unless otherwise expressly provided for in this Settlement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement. The Parties shall attempt to resolve any disagreements concerning this Settlement expeditiously and informally. A dispute shall be considered to have arisen when Respondents serve the RPM with a written Notice of Dispute, or Respondent sends the State billing the disputed costs a written Notice of Dispute that indicates it disputes costs the State has billed. A Notice of Dispute shall be served by email, facsimile, overnight mail, or some equivalent service.

# **80. Informal Dispute Resolution**

- a. For purposes of this Section XIX, the term "Reviewing Agency" shall mean the EPA for all disputes other than disputes of State costs, and in the case of State costs, it shall mean IDEQ.
- b. In the event of any dispute among the Parties under this Settlement, the Parties will first make a good-faith attempt to resolve the dispute at the Project Contact level. If the Parties are unable to resolve the dispute at this level, they will coordinate to mutually elevate the dispute to their respective, corresponding supervisory levels to resolve the dispute. The Parties will cooperate to identify and use procedures that might help resolve the dispute, such as facilitation and fact finding.
- 81. After attempting project manager and supervisory elevation, if Respondent objects to any action taken pursuant to this Settlement, including billings for Future Response Costs, it shall send the Reviewing Agency a written Notice of Dispute describing the objection(s) within 7 days after exhausting project manager and supervisory resolution under paragraph 80.b. The Reviewing Agency and Respondent shall have 45 days from the Reviewing Agency's receipt of Respondent's Notice of Dispute to resolve the dispute through informal negotiations (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of the Reviewing Agency. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement.

- 82. **Formal Dispute Resolution**. If the Parties are unable to reach an agreement within the Negotiation Period, then the position of the Reviewing Agency shall be binding unless, within 20 days Respondent submits a statement of position to the Reviewing Agency. The Reviewing Agency may, within 20 days thereafter, submit a statement of position. Thereafter, for all disputes other than disputes over State costs, an EPA management official at the Branch Chief or higher level in the Superfund and Emergency Management Division, will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement. For disputes over State costs only, the Director of the Department of Environmental Quality shall issue the written decision on the dispute to Respondent, which will be incorporated into and become an enforceable part of this Settlement. Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with the Reviewing Agency's decision, whichever occurs.
- 83. Except as provided in Paragraph 75 (Contesting Future Response Costs) or as agreed by the Reviewing Agency, the invocation of formal dispute resolution procedures under this Section does not extend, postpone, or affect in any way any obligation of Respondent under this Settlement. Except as provided in Paragraph 93, stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Settlement. In the event that Respondent does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section XXI (Stipulated Penalties).

#### XX. FORCE MAJEURE

- 84. "Force Majeure" for purposes of this Settlement, is defined as any event arising from causes beyond the control of Respondent, of any entity controlled by Respondent, or of Respondent's contractors that delay or prevents the performance of any obligation under this Settlement despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercises "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. "Force majeure" does not include financial inability to complete the Work or increased cost of performance.
- 85. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement, Respondent shall notify EPA's RPM orally or, in his or her absence, the alternate EPA RPM, or, in the event both of EPA's designated representatives are unavailable, the Director of the Superfund and Emergency Management Division, EPA Region 10, within 5 days of when Respondent first knew that the event might cause a delay. Within 5 days thereafter, Respondent shall provide in writing (electronic mail is acceptable) to EPA an explanation and description of the reasons for the delay; the anticipated duration of the delay; all

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actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or welfare, or the environment. Respondent shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Respondent shall be deemed to know of any circumstance of which Respondent, any entity controlled by Respondent, or Respondent's contractors knew or should have known. Failure to comply with the above requirements regarding an event shall preclude Respondent from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late or incomplete notice, is able to assess to its satisfaction whether the event is a force majeure under Paragraph 84 and whether Respondent has exercised its best efforts under Paragraph 84, EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit timely or complete notices under this Paragraph.

- 86. If EPA agrees that the delay or anticipated delay is attributable to a force majeure, the time for performance of the obligations under this Settlement that are affected by the force majeure will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a force majeure, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the force majeure.
- 87. If Respondent elects to invoke the dispute resolution procedures set forth in Section XVIII (Dispute Resolution), it shall do so no later than 15 days after receipt of EPA's notice. In any such proceeding, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of Paragraphs 84 and 85. If Respondent carries this burden, the delay at issue shall be deemed not to be a violation by Respondent of the affected obligation of this Settlement identified to EPA.
- 88. The failure by EPA to timely complete any obligation under the Settlement is not a violation of the Settlement, provided, however, that if such failure prevents Respondent from meeting one or more deadlines under the Settlement, Respondent may seek relief under this Section.

# XXI. STIPULATED PENALTIES

89. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 90.a and 90.b(10) for failure to comply with the obligations specified in

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Paragraphs 90.b and 90.b(10), unless excused under Section XX (Force Majeure). "Comply" as used in the previous sentence includes compliance by Respondent with all applicable requirements of this Settlement, within the deadlines established under this Settlement.

# 90. Stipulated Penalty Amounts: Payments, Financial Assurance, Major Deliverables, and Other Milestones

a. The following stipulated penalties shall accrue per violation per day for any noncompliance with any obligation identified in Paragraph 90.b:

<b>Penalty Per Violation Per Day</b>	Period of Noncompliance
\$ 1,000	1st through 14th day
\$ 3,000	15th through 30th day
\$ 7,500	31st day and beyond

# b. Obligations

- (1) Payment of any amount due under Section XVII (Payment of Response Costs).
- (2) Establishment and maintenance of financial assurance in accordance with Section XXIX (Financial Assurance).
- (3) Establishment of an escrow account to hold any disputed Future Response Costs under Paragraph 75 (Contesting Future Response Costs).
- (4) Submittal of the SRI/FFS Work Plan and associated scoping deliverables including the Sampling and Analysis Plan, Field Sampling Plan, Health and Safety Plan, Quality Assurance Project Plan, and preliminary Conceptual Site Model.
- (5) Submittal of Annual Site Characterization Data Summary Reports while field work for the SRI/FFS is ongoing.
  - (6) Submittal of the Draft and Final SRI Reports.
  - (7) Submittal of the Screening Level Ecological Risk Assessment.
- (8) Submittal of the Determination of Candidate Technologies and of Need for Testing Technical Memorandum. If EPA determines that a treatability test(s) is necessary, Respondent will also submit a Treatability Test Work Plan and associated deliverables, including a SAP, HASP, QAPP, and Treatability Study Evaluation Report.
  - (9) Submittal of the Draft and Final Focused Feasibility Study Report.

- (10) Identify substantive requirements of IPDES program for CERCLA discharges.
- 91. **Stipulated Penalty Amounts: Other Deliverables.** The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate deliverables required by this Settlement, other than those specified in Paragraph 90.b:

Penalty Per Violation Per Day	Period of Noncompliance
\$ 400	1st through 14th day
\$ 750	15th through 30th day
\$ 1,500	31st day and beyond

- 92. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 105 (Work Takeover), Respondent shall be liable for a stipulated penalty in the amount of \$500,000. Stipulated penalties under this Paragraph are in addition to the remedies available to EPA under Paragraphs 105 (Work Takeover) and 128 (Access to Financial Assurance).
- 93. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. Penalties shall continue to accrue during any dispute resolution period, and shall be paid within 15 days after the agreement or the receipt of EPA's decision. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section X (Submission and Approval of Deliverables), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (b) with respect to a decision by an EPA management official at the Branch Chief or higher level, under Paragraph 82 (Formal Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing in this Settlement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement.
- 94. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement, EPA shall give Respondent written notification of the failure and describe the noncompliance. EPA shall send Respondent a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.
- 95. All penalties accruing under this Section shall be due and payable to EPA within 30 days after Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the Dispute Resolution procedures under Section XVIII (Dispute Resolution) within the 30-day period. All payments to EPA under this Section shall indicate that the payment is for stipulated penalties and shall be made in accordance with Paragraph 73 (Payments for Future Response Costs).

- 96. If Respondent fails to pay stipulated penalties when due, Respondent shall pay Interest on the unpaid stipulated penalties as follows: (a) if Respondent has timely invoked dispute resolution such that the obligation to pay stipulated penalties has been stayed pending the outcome of dispute resolution, Interest shall accrue from the date stipulated penalties are due pursuant to Paragraph 93 until the date of payment; and (b) if Respondent fails to timely invoke dispute resolution, Interest shall accrue from the date of demand under Paragraph 95 until the date of payment. If Respondent fail to pay stipulated penalties and Interest when due, the United States may institute proceedings to collect the penalties and Interest.
- 97. The payment of penalties and Interest, if any, shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement.
- 98. Nothing in this Settlement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(*l*) of CERCLA, 42 U.S.C. § 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided, however, that EPA shall not seek civil penalties pursuant Section 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided in this Settlement, except in the case of willful violation of this Settlement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 105 (Work Takeover).
- 99. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement.

#### XXII. COVENANTS BY EPA AND IDEQ

100. Except as provided in Section XXIII (Reservations of Rights by EPA), EPA and the IDEQ covenant not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work, Future Response Costs, and State Response Costs. These covenants shall take effect upon the Effective Date. These covenants are conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement. These covenants extend only to Respondent and do not extend to any other person.

#### XXIII. RESERVATION OF RIGHTS

101. Except as specifically provided in this Settlement, nothing in this Settlement shall limit the power and authority of EPA, the United States, IDEQ, or the State of Idaho, if any, to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste on, at, or from the Site. Further, except as specifically provided in this Settlement, nothing in this Settlement shall prevent EPA from

seeking legal or equitable relief to enforce the terms of this Settlement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law. Nothing in this Settlement shall prevent the State from seeking to enforce the terms of this Settlement solely with respect to recovery of its costs. Nothing in this Settlement, except as provided in Section XXII (Covenants by EPA and IDEQ), shall prevent the United States or the State of Idaho from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

- 102. The covenants not to sue set forth in Section XXII (Covenants by EPA and IDEQ) above do not pertain to any matters other than those expressly identified therein. EPA and the State reserve, and this Settlement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:
  - a. liability for failure by Respondent to meet a requirement of this Settlement;
  - b. liability for costs not included within the definitions of Future Response Costs or State Response Costs;
    - c. liability for performance of response action other than the Work;
    - d. criminal liability;
  - e. liability for violations of federal or state law that occur during or after implementation of the Work;
  - f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
  - g. liability arising from the past, present, or future disposal, release or threat of release of Waste Material unrelated to the Work; and
  - h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site not paid as Future Response Costs under this Settlement.
- 103. This Settlement requires the performance of an SRI/FFS but does not itself require Respondent to undertake actions to remediate or clean up contamination. As such, this Settlement does not constitute a final remedy for contamination or pollution, if any, resulting from the matters addressed herein. EPA and IDEQ expressly reserve the right to seek further relief to address contamination or pollution resulting from the matters addressed herein. Nothing herein shall be deemed to bar such further relief and this Settlement shall not operate pursuant to

Idaho Code §39-108 or Idaho Code §39-4413(1)(d) to preclude IDEQ from seeking additional relief.

104. This Settlement does not affect any continuing obligations under the Consent Decree, which remains in full force and effect.

#### 105. Work Takeover

- a. In the event EPA determines that Respondent: (1) has ceased implementation of any portion of the Work; (2) is seriously or repeatedly deficient or late in its performance of the Work; or (3) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice ("Work Takeover Notice") to Respondent. Any Work Takeover Notice issued by EPA (which writing may be electronic) will specify the grounds upon which such notice was issued and will provide Respondent a period of 10 days within which to remedy the circumstances giving rise to EPA's issuance of such notice.
- b. If, after expiration of the 10-day notice period specified in Paragraph 105.a, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion(s) of the Work as EPA deems necessary ("Work Takeover"). EPA will notify Respondent in writing (which writing may be electronic) if EPA determines that implementation of a Work Takeover is warranted under this Paragraph 105.b. Funding of Work Takeover costs is addressed under Paragraph 128 (Access to Financial Assurance).
- c. Respondent may invoke the procedures set forth in Section XVIII (Dispute Resolution) to dispute EPA's implementation of a Work Takeover under Paragraph 105.b. However, notwithstanding Respondent's invocation of such dispute resolution procedures, and during the pendency of any such dispute, EPA may in its sole discretion commence and continue a Work Takeover under Paragraph 105.b until the earlier of (1) the date that Respondent's remedy, to EPA's satisfaction, the circumstances giving rise to EPA's issuance of the relevant Work Takeover Notice, or (2) the date that a written decision terminating such Work Takeover is rendered in accordance with Paragraph 82 (Formal Dispute Resolution).
- d. Notwithstanding any other provision of this Settlement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

#### XXIV. COVENANTS BY RESPONDENT

106. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, State Response Costs, or this Settlement, including, but not limited to:

- a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund through Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claims under Sections 107 and 113 of CERCLA, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law regarding the Work, Future Response Costs, and this Settlement;
- c. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Idaho Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law; or
- d. any direct or indirect claim for return of unused amounts from the Monsanto Superfund Site Special Account.
- 107. Except as provided in Paragraph 111 (Waiver of Claims by Respondent), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Section XXIII (Reservations of Rights by EPA), other than in Paragraph 102.a (liability for failure to meet a requirement of the Settlement), 102.d (criminal liability), or 102.e (liability for violations of federal or state law), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.
- 108. Nothing in this Settlement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).
- 109. Respondent reserves, and this Settlement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondent's deliverables or activities.
- 110. Respondent agrees not to seek judicial review of the final rule listing the Site on the NPL based on a claim that changed site conditions that resulted from the performance of the Work in any way affected the basis for listing the Site.

## 111. Waiver of Claims by Respondent

- a. Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that it may have:
  - (1) **De Micromis Waiver**. For all matters relating to the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials:

#### b. Exceptions to Waiver

- (1) The waiver under this Paragraph 111 shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person otherwise covered by such waiver if such person asserts a claim or cause of action relating to the Site against such Respondent.
- (2) The waiver under Paragraph 111.a(1) (De Micromis Waiver) shall not apply to any claim or cause of action against any person otherwise covered by such waiver if EPA determines that: (i) the materials containing hazardous substances contributed to the Site by such person contributed significantly or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration at the Site; or (ii) such person has failed to comply with any information request or administrative subpoena issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. § 9604(e) or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6927, or has impedded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site; or if (iii) such person has been convicted of a criminal violation for the conduct to which the waiver would apply and that conviction has not been vitiated on appeal or otherwise.

#### XXV. OTHER CLAIMS

112. By issuance of this Settlement, the United States and State of Idaho assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or State of Idaho shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors,

representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement.

- 113. Except as expressly provided in Paragraphs 111 (Waiver of Claims by Respondent) and Section XXII (Covenants by EPA and IDEQ), nothing in this Settlement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages, and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.
- 114. No action or decision by EPA pursuant to this Settlement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

#### XXVI. EFFECT OF SETTLEMENT/CONTRIBUTION

- 115. Except as provided in Paragraphs 111 (Waiver of Claims by Respondent), nothing in this Settlement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement. Except as provided in Section XXIV (Covenants by Respondent), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).
- 116. The Parties agree that this Settlement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the "matters addressed" in this Settlement. The "matters addressed" in this Settlement are the Work, Future Response Costs and State Future Response Costs.
- 117. The Parties further agree that this Settlement constitutes an administrative settlement pursuant to which Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).
- 118. Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Each Respondent also shall, with respect to any suit or claim brought against

it for matters related to this Settlement, notify EPA in writing within 10 days after service of the complaint or claim upon it. In addition, each Respondent shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial, for matters related to this Settlement.

119. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, or by the State, for injunctive relief, recovery of response costs, or other relief relating to the Site, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XXII (Covenants By EPA).

#### XXVII. INDEMNIFICATION

- The United States does not assume any liability by entering into this Settlement or by virtue of any designation of Respondent as EPA's authorized representatives under Section 104(e) of CERCLA, 42 U.S.C. § 9604(e), and 40 C.F.R. § 300.400(d)(3). Respondent shall indemnify, save, and hold harmless the United States and the State of Idaho, and their officials, agents, employees, contractors, subcontractors, and representatives for or from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, and any persons acting on Respondent's behalf or under its control, in carrying out activities pursuant to this Settlement. Further, Respondent agrees to pay the United States and the State of Idaho all costs they incur, including but not limited to attorneys' fees and other expenses of litigation and settlement arising from, or on account of, claims made against the United States or the State of Idaho based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors, and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement. The United States or the State of Idaho shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement. Neither Respondent nor any such contractor shall be considered an agent of the United States or the State of Idaho.
- 121. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 122. The State of Idaho shall give Respondent notice of any claim for which the State plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.
- 123. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States and the State of Idaho for damages or reimbursement or for set-

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off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States and the State of Idaho with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

#### XXVIII. INSURANCE

No later than 30 days before commencing any on-site Work, Respondent shall secure, and shall maintain until the first anniversary after issuance of Notice of Completion of Work pursuant to Section XXXI (Notice of Completion of Work), commercial general liability insurance with limits of liability of \$1 million per occurrence, automobile liability insurance with limits of liability of \$1 million per accident, and umbrella liability insurance with limits of liability of \$5 million in excess of the required commercial general liability and automobile liability limits, naming the United States and the State of Idaho as additional insured parties with respect to all liability arising out of the activities performed by or on behalf of Respondent pursuant to this Settlement. In addition, for the duration of the Settlement, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall resubmit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing Work on behalf of Respondent in furtherance of this Settlement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in a lesser amount, then, with respect to the contractor or subcontractor, Respondent need provide only that portion of the insurance described above that is not maintained by the contractor or subcontractor. Respondent shall ensure that all submittals to EPA under this Paragraph identify the Monsanto Superfund Site in Soda Springs, Idaho and the EPA docket number for this action.

#### XXIX. FINANCIAL ASSURANCE

125. In order to ensure completion of the Work, Respondent shall secure financial assurance, initially in the amount of \$2,100,000 ("Estimated Cost of the Work"), for the benefit of EPA. The financial assurance must be one or more of the mechanisms listed below, in a form substantially identical to the relevant sample documents available from EPA or under the "Financial Assurance - Settlements" category on the Cleanup Enforcement Model Language and Sample Documents Database at <a href="https://cfpub.epa.gov/compliance/models/">https://cfpub.epa.gov/compliance/models/</a>, and satisfactory to EPA. Respondent may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, and/or insurance policies.

- a. A surety bond guaranteeing payment and/or performance of the Work that is issued by a surety company among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury;
- b. An irrevocable letter of credit, payable to or at the direction of EPA, that is issued by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency;
- c. A trust fund established for the benefit of EPA that is administered by a trustee that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency;
- d. A policy of insurance that provides EPA with acceptable rights as a beneficiary thereof and that is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s) and whose insurance operations are regulated and examined by a federal or state agency;
- 126. Respondent shall, within 30 days of the Effective Date, obtain EPA's approval of the form of Respondent's financial assurance. Within 30 days of such approval, Respondent shall secure all executed and/or otherwise finalized mechanisms or other documents consistent with the EPA-approved form of financial assurance and shall submit such mechanisms and documents to the Regional Financial Management Officer, Douglas Zamastil, at

Douglas Zamastil United States Environmental Protection Agency 1200 Sixth Avenue, Suite 155, M/S 12-D12-1 Seattle, WA 98101-3188

Respondent shall diligently monitor the adequacy of the financial assurance. If Respondent becomes aware of any information indicating that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, Respondent shall notify EPA of such information within 7 days. If EPA determines that the financial assurance provided under this Section is inadequate or otherwise no longer satisfies the requirements of this Section, EPA will notify Respondent of such determination. Respondent shall, within 30 days after notifying EPA or receiving notice from EPA under this Paragraph, secure and submit to EPA for approval a proposal for a revised or alternative financial assurance mechanism that satisfies the requirements of this Section. EPA may extend this deadline for such time as is reasonably necessary for Respondent, in the exercise of due diligence, to secure and submit to EPA a proposal for a revised or alternative financial assurance mechanism, not to exceed 60 days. Respondent shall follow the procedures of Paragraph 129 (Modification of Amount, Form, or Terms of Financial Assurance) in seeking approval of, and submitting documentation for, the revised or alternative financial assurance mechanism. Respondent's inability to secure financial assurance in accordance with this Section does not excuse performance of any other obligation under this Settlement.

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#### 128. Access to Financial Assurance

- a. If EPA issues a notice of implementation of a Work Takeover under Paragraph 105.b, then, in accordance with any applicable financial assurance mechanism, EPA is entitled to: (1) the performance of the Work; and/or (2) require that any funds guaranteed be paid in accordance with Paragraph 128.d.
- b. If EPA is notified by the issuer of a financial assurance mechanism that it intends to cancel the mechanism, and Respondent fails to provide an alternative financial assurance mechanism in accordance with this Section at least 30 days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation in accordance with Paragraph 128.d.
- c. If, upon issuance of a notice of implementation of a Work Takeover under Paragraph 105.b, EPA is unable for any reason to promptly secure the resources guaranteed under any applicable financial assurance mechanism and/or related standby funding commitment, whether in cash or in kind, to continue and complete the Work, then EPA is entitled to demand an amount, as determined by EPA, sufficient to cover the cost of the remaining Work to be performed. Respondent shall, within 30 days of such demand, pay the amount demanded as directed by EPA.
- d. Any amounts required to be paid under this Paragraph 128 shall be, as directed by EPA: (i) paid to EPA in order to facilitate the completion of the Work by EPA or by another person; or (ii) deposited into an interest-bearing account, established at a duly chartered bank or trust company that is insured by the FDIC, in order to facilitate the completion of the Work by another person. If payment is made to EPA, EPA may deposit the payment into the EPA Hazardous Substance Superfund or into the Monsanto Superfund Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.
- e. All EPA Work Takeover costs not paid under this Paragraph 128 must be reimbursed as Future Response Costs under Section XVII (Payment of Response Costs).
- 129. **Modification of Amount, Form, or Terms of Financial Assurance**. Respondent may submit, on any anniversary of the Effective Date or at any other time agreed to by the Parties, a request to reduce the amount, or change the form or terms, of the financial assurance mechanism. Any such request must be submitted to EPA in accordance with Paragraph 126, and must include an estimate of the cost of the remaining Work, an explanation of the bases for the cost calculation, and a description of the proposed changes, if any, to the form or terms of the financial assurance. EPA will notify Respondent of its decision to approve or disapprove a requested reduction or change pursuant to this Paragraph. Respondent may reduce the amount of the financial assurance mechanism only in accordance with: (a) EPA's approval; or (b) if there is a dispute, the agreement or written decision resolving such dispute under Section XVIII (Dispute

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Resolution). Respondent may change the form or terms of the financial assurance mechanism only in accordance with EPA's approval. Any decision made by EPA on a request submitted under this Paragraph to change the form or terms of a financial assurance mechanism shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement or in any other forum. Within 30 days after receipt of EPA's approval of, or the agreement or decision resolving a dispute relating to, the requested modifications pursuant to this Paragraph, Respondent shall submit to EPA documentation of the reduced, revised, or alternative financial assurance mechanism in accordance with Paragraph 126.

130. **Release, Cancellation, or Discontinuation of Financial Assurance**. Respondent may release, cancel, or discontinue any financial assurance provided under this Section only: (a) if EPA issues a Notice of Completion of Work under Section XXXI (Notice of Completion of Work); (b) in accordance with EPA's approval of such release, cancellation, or discontinuation; or (c) if there is a dispute regarding the release, cancellation or discontinuance of any financial assurance, in accordance with the agreement or final decision resolving such dispute under Section XVIII (Dispute Resolution).

#### XXX. MODIFICATION

- 131. EPA's RPM may modify any plan or schedule or the SOW in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of EPA's RPM's oral direction. Any other requirements of this Settlement may be modified in writing by mutual agreement of the Parties.
- 132. If Respondent seeks permission to deviate from any approved work plan or schedule or the SOW, Respondent's RPM shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from EPA's RPM pursuant to Paragraph 131.
- 133. No informal advice, guidance, suggestion, or comment by EPA's RPM or other EPA representatives, or by the State or the State's representatives, regarding any deliverable submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement, or to comply with all requirements of this Settlement, unless it is formally modified.

#### XXXI. NOTICE OF COMPLETION OF WORK

134. Upon completion of all requirements under this Settlement, Respondent shall provide notice in writing to the RPM that all requirements under this Settlement, including any additional Work and payment of stipulated penalties, have been completed. If EPA determines that all Work has been fully performed in accordance with this Settlement, including any additional Work and payment of stipulated penalties but with the exception of any continuing obligations required by this Settlement, including payment of Future Response Costs, Reservation of Rights, Indemnification, and Record Retention, the RPM will provide written

notice to Respondent. If EPA determines that any Work has not been completed in accordance with this Settlement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the SRI/FFS Work Plan, if appropriate, in order to correct such deficiencies. Respondent shall implement the modified and approved SRI/FFS Work Plan and shall submit a modified draft SRI Report and/or FFS Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified SRI/FFS Work Plan shall be a violation of this Settlement.

#### XXXII. INTEGRATION/APPENDICES

- 135. This Settlement and its appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement. The parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement. The following appendices are attached to and incorporated into this Settlement:
  - a. "Appendix A" is the SOW.
  - b. "Appendix B" is the map of the Site.
  - c. "Appendix C" is a map of the historical inferred source areas identified in prior Site investigations.

#### XXXIII. ADMINISTRATIVE RECORD

136. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondent shall submit to EPA documents developed during the course of the SRI/FFS upon which selection of the remedial action may be based. Upon request of EPA, Respondent shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports, and other reports. Upon request of EPA, Respondent shall additionally submit any previous studies conducted under state, local, or other federal authorities that may relate to selection of the remedial action, and all communications between Respondent and state, local, or other federal authorities concerning selection of the remedial action.

#### XXXIV. EFFECTIVE DATE

137. This Settlement shall be effective 5 days after the Settlement is signed by the Regional Administrator or his/her delegate.

IT IS SO AGREED AND ORDERED this 23rd day of April , 2021

U.S. ENVIRONMENTAL PROTECTION AGENCY:

4/23/21 Date

Kira Lynch

Chief

Remedial Cleanup Branch

Superfund and Emergency Response Division, Region 10

Signature Page for Administrative Settlement Agreement and Order on Consent Monsanto Chemical Company Superfund Site - CERCLA Docket No. 10-2021-0088

For Idaho Department of Environmental Quality:

4/13/2011 Dated

Jess Byrne

Idaho Department of Environmental Quality

1410 Hilton Street Boise, Idaho 83706 Signature Page for Administrative Settlement Agreement and Order on Consent Monsanto Chemical Company Superfund Site - CERCLA Docket No. 10-2021-0088

For P4 PRODUCTION, L.L.C.:

7/6/20

Roger W. Gibson

President

P4 Production, L.L.C. Highway 34 North

Soda Springs, Idaho 83276

Agent Authorized to Accept Service Name on Behalf of Above-Signed Party:

Name:

Mary M. Shaffer

Title:

Head of HSE & Real Estate Law for Crop

Science

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# STATEMENT OF WORK FOR THE Monsanto Chemical Co. Superfund Site SUPPLEMENTAL REMEDIAL INVESTIGATION / FOCUSED FEASIBILITY STUDY

Soda Springs, Idaho

# **Purpose**

This Statement of Work ("SOW") sets forth the requirements for conducting a Supplemental Remedial Investigation and Focused Feasibility Study ("SRI/FFS") at the Monsanto Chemical Co. Superfund site (the "Site") located in Soda Springs, Idaho (see Figure 1). The purpose of the SRI/FFS is to investigate the nature and extent of contamination at the Site and todevelop and evaluate remedial alternatives, as appropriate. This SOW provides an overview of Work that will be carried out by P4 Production, L.L.C. ("Respondent" or "P4") as it implements the SRI/FFS at the Site.<sup>1</sup>

The Environmental Protection Agency ("EPA") signed the Record of Decision ("ROD") for the Site on April 30, 1997. The ROD identified the Contaminants of Concern ("COCs") for soil, surface water, and sediment as well as COCs for groundwater based on exceedances of EPA risk-screening criteria and documented the selected remedy for environmental media affected by operations at the plant (EPA, 1997). The remedy for the Site was identified as not protective during the Fourth Five-Year Review ("FYR") conducted in 2018 due to the following observations:

- Concentrations of COCs in groundwater and surface water remain above Remedial Goals ("RGs"), exceed RGs beyond the P4 property boundary, nature and extent of groundwater plume(s) of site-related COCs are not well defined, and currenttrends indicate that groundwater RGs will not be met in the 5- to 30-year time frame anticipated in the ROD.
- No restrictions are in place to prevent installation and/or use of domestic or irrigation wells downgradient of the Site where COCs exceed the RGs.
- Potential sources of COCs to groundwater remain in the old underflow solids (UFS) Ponds, UFS Piles, Northwest Pond, and Old Hydroclarifier Areas (Figure 2).
- Concentrations of COCs in sediments in Soda Creek are elevated based on statistical analyses
  and exceed ecological risk screening benchmarks downstream of facility in the flow-diverted
  reaches.
- Concentrations of surface water in locations where groundwater discharges to several streams and creeks exceed Idaho Department of Environmental Quality ("IDEQ") water quality standards ("WQS").

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<sup>&</sup>lt;sup>1</sup> Significant groundwater and surface water, soil, and sediment sampling, source characterization and hydrogeological investigations, and treatability studies have been conducted by Respondent in response to the recommendations and follow-up actions in the Five-Year Review Reports for the Site under the auspices of the June 29, 1998 Consent Decree and Record of Decision relating to the Site. *See* Part V ("Findings of Fact") of Administrative Settlement Agreement and Order on Consent for Supplemental Remedial Investigation / Focused Feasibility Study. The completion of such work may satisfy, in whole or in part, various elements under one or more of the tasks identified below.

• Uncertainties have been identified in the conceptual site model ("CSM") that raise questions to the effectiveness of the remedy prescribed in the ROD.

In response to the conclusions and recommendations in the 2018 FYR (and prior Five-Year Review reports), activities related to an SRI/FFS have been conducted as detailed in the Administrative Settlement Agreement and Order on Consent ("ASAOC"), which have included: expansion of groundwater monitoring network, drilling of test wells and pumping tests for hydrogeologic characterization, selenium treatability studies for groundwater plume capture and treatment, offsite well survey, and source leachability investigations. This SOW provides details to complete an SRI/FFS to address on-going environmental impacts from the Site.

This SRI/FFS SOW is attached to and is incorporated into the ASAOC for the Site. Technical work described in this SOW is intended to provide more information to Respondent for the purpose of implementing the ASAOC and is not intended to change the meaning of any ASAOC language. This SOW is also consistent with both the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. § 9601 et seq., and the National Oil and Hazardous Substances Pollution Contingency Plan, commonly called the National Contingency Plan ("NCP"), 40 CFR 300. The ASAOC and this SOW are hereafter referred to interchangeably as the "ASAOC." Any discrepancies between the ASAOC and this SOW are unintended, and whenever necessary, the ASAOC will control any interpretive disputes.

# Scope

The specific RI/FS activities to be conducted at the Site are set forth in six separate tasks.

Task 1 – Scoping

Task 2 – Site Characterization and Risk Assessment (RA) Task 3 – Treatability Studies

Task 4 – Feasibility Study

Task 5 – Detailed Analysis of Remedial Alternatives

Task 6 – National Pollutant Discharge Elimination System (NPDES)

# **Oversight**

Work conducted under the ASAOC is intended to satisfy the legal requirements for the RI/FS established under both Section 104(a)(l) of CERCLA and Idaho's Environmental Protection & Health Act, Idaho Code §§ 39-101 to 39-130; the Hazardous Waste Management Act of Idaho, Idaho Code §§ 39-4401 to 39-4432; and Idaho's Water Quality Act, Idaho Code §§ 39-3601 et seq. As such, oversight of Respondent's Work conducted under the SOW will be carried out by EPA and the IDEQ, known as the Agencies, in a manner to assure the satisfaction of all federal and state requirements. Respondent shall support the Agencies' initiation and conduct of activities related to the implementation of oversight activities.

Respondent shall submit all documents or deliverables required as part of this SOW to EPA, for the agencies' review and approval. All work products submitted to EPA are subject to EPA approval, including but not limited to, submissions specified in the Work Plan(s) or ASAOC and additional work products that may be required under Work Plan modifications. Respondent shall ensure that all plans, reports, and records are comprehensive, accurate, and consistent in content and format with the NCP and relevant EPA guidance.

Throughout the process of developing the SRI/FFS, Respondent shall prepare and submit Quarterly Progress Reports to EPA to aid in project planning, except as noted in individual tasks below. These reports must document the status of all work products under development. These reports shall describe the actions and decisions taken, and problems encountered during the previous quarter, and activities scheduled during the upcoming reporting period. Progress reports shall also summarize the extent to which the procedures and dates set forth in the ASAOC and the Work Plan are being met. These reports shall be submitted according to the Schedule included as Attachment C.

#### Schedule

All deliverables and tasks required under this SOW must be submitted or completed by the deadlines or within the time durations listed in the schedules set forth in Attachment C. Respondent may submit proposed revised schedules – with a justification for such revisions – for EPA approval. Upon EPA's approval, the revised schedules supersede the schedule set forth in Attachment C, and any previously approved versions of the SRI/FFS schedules.

#### Guidance

Respondent shall conduct the SRI/FFS and produce technical reports that are in accordance with the ASAOC, SOW, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (RI/FS Guidance) (U.S. EPA, Office of Emergency and Remedial Response, Oct. 1988), Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Ground Water at CERCLA Sites (U.S. EPA Oct. 1996), and any other guidance relevant to conducting an RI/FS. A list of the pertinent guidance documents is included at the end on this SOW. Attachments A and B include suggested document formats for the SRI Report and FFS Report, respectively. The RI/FS guidance describes the required report contents.

# Roles and Responsibilities

Respondent shall furnish all necessary personnel, materials, and services needed, or incidental to, performing the SRI/FFS, except as otherwise specified in the ASAOC. At the completion of the SRI/FFS, EPA will be responsible for the selection of a Site remedy and will document this selection in a ROD amendment.

# **Amended Remedy Requirements**

The remedial action alternative selected by the EPA will meet the cleanup standards specified in Section 121 of CERCLA, 42 U.S.C. § 9621. That is, the selected remedial action will be protective of human health and the environment, will comply with, or include a waiver of, applicable or relevant and appropriate requirements (ARARs) of other laws, will be cost-effective, will utilize permanent solutions and alternative treatment technologies or resource recovery technologies, to the maximum extent practicable, and will address the statutory preference for treatment as a principal element. The final SRI, Risk Assessment, and FFS reports, as adopted by the EPA, will, with the administrative record, form the basis for the selection of the Site's amended remedy and will provide the information necessary to support the development of the ROD amendment.

# TASK 1 – Scoping

Scoping is the initial planning process of the SRI/FFS. Respondent shall document the specific project scope in an SRI/FFS Work Plan. During the scoping process, the Site-specific objectives of the SRI/FFS will be proposed by Respondent and approved by EPA. In addition to developing the Site-specific objectives of the SRI/FFS, Respondent shall define a general project management approach for the Site, which shall be documented by Respondent in a Work Plan. Because the Work required to perform an SRI/FFS is not fully known at the outset and is phased in accordance with a Site's complexity and the amount of available information, it may be necessary to modify the Work Plan during the SRI/FFS to satisfy the objectives of the study. When scoping the specific aspects of this project, Respondent shall meet with EPA either in person or telephonically to discuss all project planning decisions and special concerns associated with the Site.

The following activities shall be performed by Respondent as a function of the project planning process.

# a. Site Background

Respondent has previously gathered, analyzed, and presented existing Site background information. Respondent shall conduct a work session to determine additional data needs to assist in planning the scope of the SRI/FFS.

# Collect and analyze existing data and document the need for additional data.

Before planning SRI/FFS activities, all existing Site data shall be thoroughly compiled and reviewed by Respondent. Historical data shall be submitted electronically according to EPA Region 10 specifications. Respondent shall refer to Table 2-1 of the RI/FS Guidance for a comprehensive list of data collection information sources. Specifically, this must include presently available data relating to the varieties and quantities of hazardous substances at the Site, and past disposal practices. This must also include results from previous sampling events (e.g., annual water quality reports and soil and sediment quality data collected over the past 20 years). Only data that are determined by EPA to be of appropriate type and quality to support specific intended uses shall be utilized in the SRI/FFS. This includes data utilized to develop the baseline risk assessment (BLRA), to identify additional data needs to better characterize the Site, to better define potential ARARs, and to develop a range of preliminarily identified remedial alternatives. Data Quality Objectives (DQOs) shall be established, subject to EPA's approval, which shall be used to assess the usefulness of existing data and to direct future data gathering efforts. Decisions regarding the necessary data needs and DQOs will be made by EPA.

#### Conduct site visit

Respondent, EPA, and IDEQ shall make best efforts to conduct a Site visit<sup>2</sup> during the project scoping phase to assist in improving the conceptual understanding of sources and areas of contamination as well as potential exposure pathways and receptors at the Site.<sup>3</sup> During the Site visit Respondent shall observe the Site's physiography, hydrology, geology, and demographics, as well as natural resource, ecological, and cultural resources. This information shall be utilized to better

<sup>2</sup> Given COVID-19 travel restrictions and the parties' already extensive experience with the Site, the site visit may be scheduled to occur beyond the 120-day scoping period.

<sup>&</sup>lt;sup>3</sup> In addition to pre-ROD investigations, the Third and Fourth Five-Year Review Reports for this Site note that characterization reports have previously been submitted for UBZ-1 and UBZ-2.

scope the project and to determine the extent of additional data necessary to characterize the Site, better define potential ARARs, and assist in identifying potential remedial alternatives.

# b. Project Planning

Once Respondent has collected and analyzed existing data and conducted a Site visit, the specific project scope shall be planned.

Project planning activities include those tasks described below, as well as identifying data needs, developing a work plan, designing a data collection program, and identifying health and safety protocols. Respondent shall meet with EPA's Remedial Project Manager (RPM) regarding the following activities and before drafting the scoping deliverables listed below.

# Preliminary conceptual site model

Information on the waste sources, pathways, receptors, cultural resources, and other information concerning the Site is used to develop a conceptual understanding of the Site which helps to evaluate potential risks to human health and the environment. The CSM should include known and suspected sources of contamination, types of contamination and affected media/resources, known and potential routes of migration, and known or potential human and environmental receptors. This effort, in addition to assisting in identification of locations where sampling is necessary, will also assist in the identification of potential remedial technologies. Additional information for evaluating exposure concerns through the use of a CSM is provided in the DQO Guidance. The CSM must be updated as new information becomes available.

The preliminary CSM associated with the ecological risk assessment (ERA) must include species and their habitats that could be impacted by Site-related contamination based on information generated from a historical review and a cultural resource audit and will show the relationships among species and potential exposure pathways. RPM shall provide assistance to the Respondent in collecting this information as requested. If information is not provided to Respondent within the timeframe specified by EPA, the RPM will notify Respondent in writing either to proceed with the preparation of the RI/FS Work Plan without the information or to delay its submittal pending receipt of the information. The preliminary CSM for the human health risk assessment (HHRA) must identify potential receptor populations and potential exposure pathways.

#### Conduct a Reuse Assessment

If EPA determines that a Reuse Assessment is necessary, Respondents will perform the Reuse Assessment in accordance with applicable guidance. The Reuse Assessment should provide sufficient information to develop realistic assumptions of the reasonably anticipated future uses for the Site. Respondents shall prepare the Reuse Assessment in accordance with EPA guidance, including, but not limited to: "Reuse Assessments: A Tool to Implement the Superfund Land Use Directive." OSWER Directive 9355.7-06P (June 2001).

#### Refine and document preliminary remedial action objectives and alternatives

Once existing Site information has been analyzed and an understanding of the potential Site risks have been determined, Respondent shall review and, if necessary, refine the Remedial Action Objectives (RAOs) that have been identified by EPA for each actually or potentially contaminated

medium. The revised RAOs must be documented in a technical memorandum and subject to EPA's approval.

Respondent shall then identify a preliminary range of potential remedial action alternatives and associated technologies. The range of potential alternatives shall encompass, where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

# Document the need for treatability studies

Respondent shall conduct bench and/or pilot studies as necessary to determine the suitability of various remedial technologies to Site conditions and problems. Technologies that may be suitable to the Site should be identified as early as possible to determine whether there is a need to conduct treatability studies to better estimate costs and performance capabilities. Should treatability studies be determined to be necessary, a testing plan identifying the types and goals of the studies, the level of effort needed, a schedule for completion, and the data management guidelines should be submitted to EPA for review and approval. Upon EPA approval, a test facility and any necessary equipment, vendors, and analytical services will be procured by the contractor.

When the treatability studies are completed, Respondent shall evaluate the results to assess the technologies with respect to the goals identified in the test plan. A report summarizing the testing program and its results shall be prepared by Respondent and presented in the final SRI/FFS report.

Respondent shall implement all management and quality control review activities for this task. If remedial actions involving treatment have been identified by Respondent or EPA, treatability studies shall be required, except where Respondent can demonstrate to the satisfaction of EPA that they are not needed. Where treatability studies are needed, initial treatability testing activities (such as research and study design) should be planned to occur concurrently with Site characterization activities.

#### Begin preliminary identification of potential ARARs

Respondent shall conduct a preliminary identification of potential ARARs (chemical-specific, location-specific, and action-specific) to assist in the refinement of the RAOs and the initial identification of remedial alternatives. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

### c. Scoping Deliverables

At the conclusion of the project planning phase, and within 120 days of the Effective Date of the ASAOC, Respondent shall submit an SRI/FFS Work Plan, a Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP), and a Site Health and Safety Plan (HASP)<sup>5</sup>. These plans must be reviewed and, except for the HASP, approved by EPA prior to the initiation of SRI/FFS Work Plan-related field activities.

<sup>&</sup>lt;sup>4</sup> As noted in the Fourth Five-Year Review Report, Respondent has conducted pilot plant treatability studies for selenium treatment technologies. As noted in Task 3 below, Respondent will begin operating a demonstration scale selenium water treatment pilot plant during the second quarter of 2021.

<sup>&</sup>lt;sup>5</sup> With the exception of the SRI/FFS Work Plan, there are EPA-approved versions of the work plans listed here. The requirements in this section would address revisions or updates to these plans if needed.

#### SRI/FFS Work Plan

A SRI/FFS Work Plan (the "Work Plan") documenting the decisions and evaluations completed during the scoping process shall be submitted to the RPM for review and approval. This could include a phased approach to focus on issues of most concern or requiring early action (if warranted). The Work Plan shall be developed in conjunction with the SAP and the Site HASP, although each plan may be delivered under separate cover. The Work Plan shall include a comprehensive description of the work to be performed, including the methodologies to be utilized, as well as a corresponding schedule for completion. In addition, the Work Plan shall include the rationale for performing the required activities. Specifically, the Work Plan must present a statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the SRI/FFS. Furthermore, the plan must include a Site background summary setting forth the Site description including the geographic location of the Site, and to the extent possible, a description of the Site's physiography, hydrology, hydrogeology, geology, demographics, ecological, cultural, and natural resource features; a synopsis of the Site history and a description of previous responses that have been conducted at the Site by local, state, federal, or private parties; and a summary of the existing data in terms of physical and chemical characteristics of the contaminants identified, and their distribution among the environmental media at the Site. In addition, the plan must include a description of Respondent's Site management strategy developed during scoping and a preliminary identification of remedial alternatives and data needs for evaluation of remedial alternatives. The plan must reflect coordination with treatability study requirements, if treatability studies are initiated. It must include a process for and manner of identifying potential ARARs (chemical-specific, location-specific, and action-specific).

Finally, the major part of the Work Plan is a detailed description of the tasks to be performed, information needed for each task and for the SLERA, information to be produced during and at the conclusion of each task, and a description of the work products that will be submitted to the RPM. This includes the deliverables set forth in the remainder of this SOW; a schedule for each of the required activities which is consistent with the RI/FS guidance; and a project management plan, including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, data format and backup data management), monthly reports to the RPM and meetings and presentations to EPA and the Support Agencies at the conclusion of each major phase of the SRI/FFS. Respondent must refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required Work Plan, and a suggested format can be found in Attachment A.

# Sampling and Analysis Plan

Respondent shall prepare a SAP to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet DQOs. The SAP provides a mechanism for planning field activities and consists of a FSP and a QAPP. The SAP, FSP, and QAPP shall be prepared in accordance with EPA DQO guidance documents (EPA 2000, 2002a, 2002b, and 2006).

The FSP must define in detail the sampling and data-gathering methods that will be used on the project. It must include sampling objectives, sample location and frequency, sampling equipment and procedures, and sample handling and analysis. The QAPP must describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that will be used to achieve the desired DQOs. The DQOs shall, at a minimum, reflect use of analytic methods to identify contamination and remediate contamination consistent with the

levels for remedial action objectives identified in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), pages 51425- 26 and 51433 (December 21, 1988). The QAPP shall be prepared in accordance with requirements in EPA QA/R-5 EPA Requirements for Quality Assurance Project Plans (latest draft or revision) and EPA QA/G-5 EPA Guidance for Quality Assurance Project Plans (latest draft or revision), EPA QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Investigations, and EPA QA/G-4 Guidance for the Data Quality Objective Process. All sampling and analyses performed pursuant to this SOW shall conform to EPA direction, approval, and guidance regarding sampling, QA/QC, data validation, and chain-of-custody procedures. In addition, the QAPP must address the following: sampling procedures; sample custody; analytical procedures; data reduction, validation, and reporting; and personnel qualifications.

Field personnel must be trained and conduct work in accordance with EPA and OSHA requirements and guidance. Respondent shall demonstrate, in advance and to the satisfaction of EPA, that each laboratory they may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the contaminants of concern in the media of interest within detection and quantification limits consistent with both QA/QC procedures and DQOs approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program (CLP) is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA will be used. If the laboratory is not in the CLP program, a laboratory QA program must be submitted for EPA's review and approval. EPA may require that Respondent submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment, and material specifications. Respondent shall provide assurances that EPA has access to laboratory personnel, equipment, and records for sample collection, transportation, and analysis.

#### Potential Target Analytes

Due to extensive monitoring already conducted at the Site, it is recognized that the Contaminants of Concern (COCs) have been previously defined. Respondent shall review the COCs identified in the ROD for surface water, groundwater, sediments, and soils analytes relative to ARARs, preliminary remediation goals (PRGs), screening levels, Site- specific risk assessment data needs, treatability study data needs, feasibility study data needs, and other potential performance standards. All metal analytes (aqueous) shall be analyzed for total and dissolved constituents unless otherwise approved by EPA. Analytes may be added and/or removed from further consideration or monitored at varying frequencies based upon Site-specific factors such as dry or wet year hydrologic cycles as approved or otherwise directed by EPA.

# Site Health and Safety Plan

A HASP shall be prepared in conformance with Respondent's health and safety program, and in compliance with OSHA regulations and protocols. It should be noted that EPA does not "approve" Respondent's health and safety plan, but rather EPA reviews it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.

#### **TASK 2 - SITE CHARACTERIZATION**

As part of the SRI, Respondent shall perform the activities described in this task, including the preparation of a Site characterization summary and a SRI report. The overall objective of Site

characterization is to describe areas of a Site that may pose a threat to human health or the environment. This is accomplished by first determining a Site's physiography, geology, and hydrology/hydrogeology. Surface and subsurface pathways of migration must be defined. In addition to the site characterization work and extensive hydrogeologic studies conducted in the 1990s for the 1997 ROD, Respondent undertook additional investigations and characterization programs over the past ten years leading to the construction and extended pump testing of three pump-back wells at the southern fenceline and the design and construction of a demonstration scale selenium water treatment plant; these investigations are memorialized in various reports including the following: Report on Source Area Investigation UBZ-2 Phase 1 (Golder 2013); Work Plan for Hydrogeologic Characterization of UBZ-1 and UBZ-2 (Golder 2014); Report on Phase II UBZ-2 Source Area Investigation (Golder 2015); Addendum to Work Plan for Hydrogeologic Characterization of UBZ-1 and UBZ-2 (Golder 2016); Addendum to Work Plan for Hydrogeologic Characterization of UBZ-1 and UBZ-2 for Extended Pump Test (Golder 2017); Work Plan for (2017 UBZ-2, 3, and 4) Monitoring Well Installation and Testing (Golder 2017); UBZ- and UBZ-2 Extended Pump Test – Addendum to Work Plan for Hydrogeologic Characterization of UBZ-1 and UBZ-2 for Extended Pumping Test (Golder 2019); 2019 Summary Report Groundwater Conditions at the Monsanto Soda Springs, Idaho Plant (Golder 2019). These investigations and reports memorialize, in part, an effort to identify the potential sources of contamination and define the nature, extent, and volume of these sources of contamination, including their physical and chemical constituents as well as their background concentrations at incremental locations in the affected media. In addition, during the last five years, Respondent has installed additional monitoring wells and undertaken extensive hydrogeological characterization of the Site. Respondent shall continue to investigate the extent of migration of this contamination as well as its volume and any changes in its physical or chemical characteristics, to provide for a comprehensive understanding of the nature and extent of contamination at the Site. Using this information, contaminant fate and transport is then determined and projected.

During this phase of the SRI/FFS, the Work Plan, SAP, and HASP are implemented. Field data are collected and analyzed to provide the information required to accomplish the objectives of the study as described by the outcome of Task 1. For any new site characterization studies, Respondent shall notify the RPM at least two weeks in advance of the field work regarding the planned dates for field activities, including ecological field surveys, field layout of the sampling grid, excavation, installation of pump-back and monitoring wells, initiating sampling, installation and calibration of equipment, pump tests, and initiation of analysis and other field investigation activities. Should Respondent wish to make a change in analytical laboratories, Respondent shall demonstrate that the laboratory and type of laboratory analyses that will be utilized during Site characterization meet the specific QA/QC requirements and the DQOs of the Site investigation as specified in the SAP. In view of the unknown Site conditions, activities are often iterative, and to satisfy the objectives of the SRI/FFS, it may be necessary for Respondent to supplement the work specified in the initial Work Plan. In addition to the deliverables below, Respondent shall provide a monthly progress report and participate in weekly meetings or conference calls at major points in the SRI/FFS.

# a. Field Investigation

The field investigation shall include the gathering of data to define Site physical and biological characteristics, sources of contamination, and the nature and extent of contamination at the Site.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> See Note 1.

These activities shall be performed by Respondent in accordance with the Work Plan and SAP. At a minimum, this shall address the following:

# Implement and document field support activities

Respondent shall initiate field support activities following approval of the Work Plan and SAP. Field support activities may include obtaining access to the Site, scheduling, and procuring equipment, office space, laboratory services, and/or contractors. Respondent shall notify the RPM at least two weeks prior to initiating field support activities so that EPA may adequately schedule oversight tasks. Respondent shall also notify the RPM upon completion of field support activities.

# Investigate and define site physical and biological characteristics

Respondent shall collect data on the physical and biological characteristics of the Site and its surrounding areas, including the physiography, geology, and hydrology, and specific physical characteristics identified in the work plan. This information must be ascertained through a combination of physical measurements, observations, and sampling efforts, and will be utilized to define potential transport pathways and human, cultural, and ecological receptor populations. In defining the Site's physical characteristics, Respondent shall also obtain sufficient engineering data (such as the effects of contaminated media weathering and ground and surface water contaminant loading) to aid in the projection of contaminant fate and transport, and the development and screening of remedial action alternatives, including information to assess treatment technologies.

#### <u>Define sources of contamination</u>

Respondent shall identify each source of contamination and define the areal extent and depth of contamination associated with each source in all media. The physical characteristics and chemical constituents and their concentrations must be determined for all known and discovered sources of contamination. Respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources consistent with the OAPP and DOOs.

Defining the source of contamination must include analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence over time, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

#### Delineate the nature and extent of contamination

Respondent shall gather information to delineate the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, Respondent must utilize the information and site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. Respondent shall then implement an iterative monitoring program and any study program identified in the work plan or SAP such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at the Site can be determined. In addition, Respondent shall gather data for calculations of contaminant fate and transport. This process must be continued until the area and depth of contamination are known. This information will be used to determine the level of risk presented by the Site and to help develop appropriate remedial action alternatives for evaluation.

# b. Data Analyses

# **Evaluate Site characteristics**

Respondent shall analyze and evaluate the data to describe: (1) Site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the Site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The evaluation must include the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA together with a sensitivity analysis. The SRI data shall be presented in a format (i.e., computer disc or equivalent) to facilitate the preparation of the BLRA. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Respondent shall then collect any data required to address data gaps identified by EPA as needed to complete the BLRA. This evaluation shall also provide information relevant to Site characteristics necessary to evaluate the need for remedial action in the BLRA and to aid in the development and evaluation of remedial alternatives. Analyses of data collected for Site characterization must meet the DQOs developed in the QA/QC plan stated in the SAP (or as revised during the SRI).

# c. Data Management Procedures

Respondent shall consistently document the quality and validity of field and laboratory data compiled during the SRI.

#### Document field activities

Information gathered during Site characterization shall be consistently documented and adequately recorded by Respondent in well-maintained field logs and laboratory reports. The method(s) of documentation must be specified in the work plan and/or the SAP. Field logs must be utilized to document observations, measurements, and significant events that have occurred during field activities. Laboratory reports must document sample custody, analytical responsibility, analytical results, adherence to prescribed protocols, nonconformity events, corrective measures, and/or data deficiencies.

# Maintain sample management and tracking

Respondent shall maintain field reports, sample shipment records, analytical results, and QA/QC reports to ensure that only validated analytical data are reported and utilized in the development and evaluation of remedial alternatives. Analytical results developed under the Work Plan must not be included in any Site characterization reports unless accompanied by or cross-referenced to a corresponding QA/QC report. In addition, Respondent shall establish a data security system to

<sup>7</sup> Golder has previously submitted a work plan for the groundwater model that has been developed for the site and has periodically presented results of the modeling effort to EPA.

safeguard chain-of-custody forms and other project records to prevent loss, damage, or alteration of project documentation.

# Data validation management

All validated data shall be made available to EPA in electronic format. The validated data, along with QA/QC information and data validation summaries, shall be submitted in electronic format within 90 calendar days from the date of collection of the last sample from each sampling event. Field and validated analytical data results for all media sampled shall be submitted to EPA by uploading the data to the Water Quality Exchange (WQX) using the Central Data Exchange (CDX). Field and laboratory samples must include information on the sampling locations which will also be submitted to WQX via CDX. (See www.epa.gov/storet/wqx.hmtl)

#### d. Site Characterization Deliverables

Respondent shall prepare the preliminary Site characterization summary and the SRI report.

# **Data Summary Reports**

After completing each annual field season's sampling and analysis (i.e., at the end of the field season each calendar year), Respondent shall prepare a concise Site characterization Data Summary Report (DSR). This report must review the investigative activities that have taken place and describe and display Site data documenting the location and characteristics of surface and subsurface features and contamination at the Site, including the affected media, locations, types, physical state, concentrations of contaminants and quantities. In addition, reports shall document the location, dimensions, physical condition and varying concentrations of each contaminant for each source and the extent of contaminant migration through each of the affected media. Each DSR must also evaluate data gaps and identify additional and/or modified sampling and analysis that shall be included in modifications to the SAP for each subsequent field season. If acceptable to EPA, the DSR following the final field season of data collection can be eliminated as a separate deliverable, and the information collected during the final field season can be presented in the SRI report.

### Supplemental Remedial Investigation Report (SRI)

Respondent shall prepare and submit a draft SRI report to the RPM for review and approval. This report shall summarize results of field activities to characterize the Site, sources of contamination, nature and extent of contamination, and the fate and transport of contaminants. Respondent shall refer to the RI/FS Guidance for an outline of the report format and contents, and a suggested format for the SRI report can be found in Attachment A. Following comment by EPA, Respondent shall prepare a final SRI report satisfactorily addressing the comments.

# <u>Updated Risk Assessment (RA)</u>

Respondent shall update, as needed, the previously conducted RA assessing the potential human health and ecological risks posed by the Site in the absence of any remedial action. To the extent necessary to update the RA, the RA needs to incorporate contaminant concentration data and Site information obtained during the original RI/FS and SRI and provide an updated conceptual

<sup>&</sup>lt;sup>8</sup> Respondent's annual groundwater and surface water quality reports (provided IDEQ and EPA over the past 20 years) constitute DSRs.

exposure model for the Site identifying the sources, receptors and exposure pathways that are potentially complete onsite and within the extent of contamination. The updated RA shall be conducted using EPA recommended default exposure and toxicity assumptions unless site-specific parameters are available and approved.

# **Updated Human Health Risk Assessment (HHRA)**

The HHRA previously prepared by EPA shall be updated in accordance with the EPA's human health guidance (1989). This effort will involve updating one or more of the following four components: contaminant identification, exposure assessment, toxicity assessment, and risk characterization.

Contaminant Identification – COCs were initially identified in the ROD and have been evaluated during each of the Five Year Reports ("FYRs"). The Fourth FYR noted that the 1997 ROD did not identify surface water standards ("WQS") as ARARs, that EPA should consider whether to incorporate the Idaho WQS as an ARAR and the selenium WQS as an RG, that no new contaminants have been identified at the Site, and that methodology changes since the 1997 ROD are not anticipated to be significant enough to result in changes to RGs. Respondent also intends to discharge groundwater extracted from pump-back wells installed in the groundwater plume (after treatment in the Demonstration Scale Selenium Water Treatment Plant) along with groundwater extracted from production wells (used for non-contact cooling at the Plant), the latter of which was previously described in the 1997 ROD. To the extent this combined discharge is a CERCLA discharge, any potential contaminant that will be discharged to Soda Creek from the Demonstration Scale Selenium Water Treatment Plant shall be evaluated as a contaminant in the updated Risk Assessment. Respondent shall prepare a technical memorandum on the incorporation of Idaho WQS, substantive requirements of an IPDES discharge, and the TMDL appliable to Soda Creek as ARARs or TBCs, and the selenium WQS as an RG.

Exposure Assessment –Respondent has previously identified actual or potential exposure pathways, characterized potentially exposed populations, and evaluated the actual or potential extent of exposure in conjunction with the original ROD and have been evaluated during each of the FYRs. The Fourth FYR noted that the concentration of COCs in the four off-site domestic wells impacted by the Site are all below the relevant RGs and that potable water is provided by the City for the citizens of Soda Springs; therefore, EPA concluded that groundwater contamination related to the Site is not believed to pose an unacceptable risk under the current conditions. Respondent shall prepare a technical memorandum identifying any changes since the Fourth FYR that would warrant revisiting EPA's conclusion therein.

Toxicity Assessment – The Fourth FYR notes that human health toxicity factors for several contaminants evaluated during the risk assessment have changed since the time of the remedy selection, although the changes to these toxicity factors were minor. Although inhalation toxicity factors were revised in 2009 and the impact of these changes on baseline risk is unknown, these methodology changes are unlikely to affect the remedy because exposures via the dust inhalation pathway are much less than through ingestion. Respondent shall provide a technical memorandum assessing the impact of the changes in inhalation toxicity factors on the baseline risk assessment. EPA's risk-based screen levels with updated toxicity values for various default land uses are available at <a href="https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables">https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables</a>. Additional screening levels can be calculated using the calculator at the same website address.

<sup>&</sup>lt;sup>9</sup> Respondent agrees to EPA request to add phosphorous to the list of COCs and address loading to Soda Creek.

<u>Risk Characterization</u> –Respondent shall integrate information developed during the exposure and toxicity assessments to characterize the current or potential risk to human health and/or the environment posed by the Site. This characterization should identify the potential for adverse health effects for the contaminants of concern and identify any uncertainties associated with contaminant(s), toxicity(ies), and /or exposure assumptions.

# Screening Level Ecological Risk Assessment (SLERA)

EPA (1997) outlines an 8-step process, including numerous scientific/management decision points (SMDPs), for evaluating risks to potential ecological receptors. The SLERA consists of the following steps:

- Step 1: Screening Level Problem Formulation and Toxicity Assessment includes visit to the site, summary of information gathered about the site history, contaminant and their sources, transport pathways, ecology, exposure points, and a review of scientific literature to determine at what contaminant levels will have adverse effects;
- Step 2: Screening Level Exposure Estimate and Risk Calculation calculating how much ecological receptors are exposed to contaminants at the site and calculating hazard quotients by comparing the contaminant levels in site media with levels that are known to be protective of relevant ecological receptors.

If no risks are estimated during the SLERA using conservative assumptions, then the ecological risk assessment process stops at that point. If the SLERA predicts risks may be unacceptable to ecological receptors, then further evaluation may be necessary or remedial actions to address the risks may be considered.

An ecological risk assessment was completed for the original remedy. The Respondent shall provide a technical memorandum identifying any new information that warrants revising or updating the previously completed ecological risk assessment.

#### **TASK 3 - TREATABILITY STUDIES**

If potential remedial actions involving treatment have been identified by EPA or Respondent, Respondent must conduct treatability studies except where they can demonstrate to the satisfaction of EPA that such studies are not needed. Respondent has conducted pilot studies of innovative technology alternatives for the ex-situ groundwater treatment remedy (including groundwater pump testing, pilot studies of selenium removal technologies, and a full-scale demonstration unit of the best performing selenium removal technology from the pilot studies). However, additional treatability studies, such as those for removal of other COCs in groundwater or other media of concern identified in Task 3a, below, may be necessary.

# a. Determination of Candidate Technologies and Need for Testing

Respondent shall identify in a technical memorandum, subject to EPA review and approval, candidate technologies for a treatability studies program during project planning (Task 1). The listing of candidate technologies must cover the range of technologies required for the development and analysis of alternatives (Task 4 and Task 5). The specific data requirements for the testing program will be determined and refined during site characterization and the development and screening of remedial alternatives (Tasks 3 and 5).

# Conduct literature survey and determine the need for treatability testing

Respondent shall conduct a literature survey to gather information of performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. If practical candidate technologies have not been sufficiently demonstrated or cannot be adequately evaluated for this Site based on available information, treatability testing must be conducted. Where it is determined by EPA that treatability testing is required, and unless Respondent can demonstrate to EPA's satisfaction that it is not needed, Respondent shall submit a SOW to the RPM outlining the steps and data necessary to evaluate and initiate the treatability testing program.

# **Evaluation of treatability studies**

Once a decision has been made to perform treatability studies, Respondent and EPA will decide the types of treatability testing to utilize (e.g., bench and/or pilot). Because of the time required to design, fabricate, and install pilot scale equipment as well as perform testing for various operating conditions, the decision to perform pilot testing should be made as early in the process as possible to minimize potential delays of the FFS. To assure that a treatability testing program is completed on time, and with accurate results, Respondent shall either submit to the RPM a treatability testing work plan or an amendment to the original Site work plan for EPA's review and approval.

# b. Treatability Testing and Deliverables

The deliverables that are required, in addition to the memorandum identifying candidate technologies, where treatability testing is conducted, include a work plan, a sampling and analysis plan, and a final treatability evaluation report. EPA may also require a treatability study health and safety plan, where appropriate.

#### Treatability testing work plan

Respondent shall prepare a treatability testing work plan or amendment to the original Site Work Plan for EPA's review and approval, describing the Site background, remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The DQOs for treatability testing must be documented as well. If pilot scale treatability testing is to be performed, the pilot scale work plan will describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-site, permitting requirements must be addressed.

#### Treatability study SAP

If the original QAPP or FSP does not address activities to be performed during the treatability tests, a separate treatability study SAP or amendment to the original Site SAP must be prepared by Respondent for EPA's review and approval. Task 1, Item c. of this statement of work provides additional information on the requirements of the SAP.

# Treatability study HASP

If the original HASP is not adequate for defining the activities to be performed during the additional treatment tests, a separate or amended HASP must be developed by Respondent. Task 1, Item c, of this SOW provides additional information on the requirements of the health and safety plan. EPA does not "approve" the treatability study HASP.

# Treatability study evaluation report

Respondent previously submitted treatability testing reports for pilot testing. Following completion of additional treatability testing for the full-scale demonstration or other treatability tests, Respondent shall analyze and interpret the testing results in a technical report to EPA. Depending on the sequence of activities, this report may be a part of the RI/FS report or a separate deliverable. The report must evaluate the relevant technology's effectiveness, implementability, cost, and actual results as compared with predicted results. The report must also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

# TASK 4 - FOCUSED FEASIBILITY STUDY

The Focused Feasibility Study is comprised of two primary activities: (1) the development and screening of alternatives, and (2) the detailed analysis of alternatives. The alternatives surviving the screening process will be subject to the detailed analysis process. The FFS Report must document the results of these two components of the FFS. Interim deliverables associated with these activities will be identified in the SRI/FFS Work Plan. The SRI and FFS are interactive and will be conducted concurrently, to the extent practicable, in a manner that allows information and data collected during the SRI to influence the development of remedial alternatives during the FFS, which in turn affect additional information and data needs and the scope of any necessary treatability studies and risk assessments.

#### a. Remedial Alternative Development

Respondent shall develop and evaluate a range of appropriate remedial options that, at a minimum, will remediate or control any contaminated media (soil, surface water, ground water, sediments) remaining at the Site, as deemed necessary in the SRI to ensure protection of human health and the environment and comply with ARARs, concurrent with the RI site characterizationtask.

A range of remedial alternatives must be developed to identify and provide a variety of remedial options which then can be evaluated. This range of alternatives must include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which varies in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed. Options involving containment with little or no treatment must be included, as well as options involving both treatment and containment, and a no-action alternative. The following activities shall be performed by Respondent during the development of remedial alternatives.

#### Refine and document remedial action objectives

Based on the RA, Respondent shall review, and if necessary, modify the Site-specific remedial action objectives (RAOs) and the list of applicable preliminary remediation goals (PRGs). The

modified PRGs shall be documented in a technical memorandum that will be reviewed and approved by EPA. These modified PRGs must specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

# Develop general response actions

Respondent shall develop a range of general response actions for each medium of interest addressing containment, treatment, excavation, pumping, or any other actions, singly or in combination, that may be utilized to satisfy the remedial action objectives for the Site.

#### Identify areas or volumes of media

Respondent shall identify volumes and/or areas of media to which general response actions might be applied, taking into account the requirements for protectiveness as identified in the RAOs and the chemical and physical characterization of the Site.

# **Identify Institutional Controls**

Respondent shall identify and evaluate potential institutional controls (ICs) applicable to each general response action that may be applied. The Alternatives Analysis for ICs and Screening shall (i) describe the restrictions needed on land, water, or other resources and their relationship to the remedial action objectives; (ii) determine the specific types of ICs that can be used to address and implement the land, water, or other resource use restrictions;

(iii) investigate when the ICs need to be implemented and how long they must remain in place; (iv) research, discuss, and document any agreement or other arrangements with the proper entities (e.g., state, local government, local landowners, conservation organizations, Respondents) on exactly who will be responsible for implementing, maintaining, and enforcing the ICs. The Alternatives Analysis for ICs and Screening shall also evaluate the ICs identified in the Memorandum on Development and Screening of Alternatives against the nine evaluation criteria outlined in the NCP (40 C.F.R. § 300.430(e)(9)(iii)) for CERCLA cleanups, including but not limited to costs to implement, maintain, and/or enforce the ICs. The Alternatives Analysis for ICs and Screening shall be submitted as an appendix to the draft Focused Feasibility Study Report ("FFS Report").

#### Identify, screen, and document remedial technologies

Respondent shall identify and evaluate potential remedial technologies applicable to each general response action. Respondent shall identify various alternatives for implementing each remedial technology. These alternatives must be evaluated and screened based upon their effectiveness, implementability, and cost factors. Generally, this screening is only necessary when there are many feasible alternatives available for detailed analysis. If necessary, the screening of alternatives shall be conducted to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening must preserve the range of treatment and containment alternatives that was initially developed insuring that the alternatives will meet RAOs, ARARs and all other identified performance standards. The range of remaining alternatives must include options that use treatment technologies and permanent solutions to the maximum extent practicable. Respondent shall prepare a technical memorandum summarizing the results and reasoning employed in screening and arraying alternatives that remain after screening. In addition, a description of the remedial technology alternatives which were eliminated from

further consideration as well as the reasons for eliminating the alternatives must be included in the memorandum.

## Assemble and document alternatives

Respondent shall assemble selected representative technologies into a range of alternatives for each affected medium or operable unit. Together, all of the alternatives will represent treatment and containment combinations that will address either all of the Site or operable units. A summary of the assembled alternatives and their related action-specific ARARs must be prepared for EPA by Respondent for inclusion in a technical memorandum.

#### TASK 5 - DETAILED ANALYSIS OF REMEDIAL ALTERNATIVES

The detailed analysis of alternatives shall be conducted by Respondent to provide EPA with the information needed to allow for the selection of an amended Site remedy. This analysis is the final task to be performed by Respondent during the FFS.

## a. Detailed Analysis of Alternatives

Respondent shall conduct a detailed analysis of alternatives which must consist of an analysis of each option against a set of nine evaluation criteria and a comparative analysis of all options using the same evaluation criteria as a basis for comparison. EPA has developed the nine evaluation criteria to address the statutory requirements and preferences of CERCLA

### Apply nine criteria and document analysis

Respondent shall apply nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will be protective of human health and the environment; will be in compliance with, or include a waiver of, ARARs; will be cost- effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) costs; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: Criteria 8 and 9 are considered after the RI/FS report has been released to the general public). For each alternative, Respondent must provide: (1) a description of the alternative that outlines the remedial strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion of the individual criterion assessment.

#### Compare alternatives against each other and document the comparison of alternatives

Respondent shall perform a comparative analysis between the remedial alternatives. That is, each alternative must be compared against the others using the evaluation criteria as a basis of comparison. Identification and selection of the preferred alternative are reserved by EPA. Respondent shall prepare a technical memorandum summarizing the results of the comparative analysis.

### b. Detailed Analysis Deliverables

In addition to the technical memorandum summarizing the results of the comparative analysis, Respondent shall submit a draft FFS report to the RPM for review and approval. Once EPA's comments have been addressed by Respondent to the satisfaction of EPA, the final FFS report may be bound with the final SRI report.

#### Focused Feasibility Study report

Respondent shall submit a draft FFS report for EPA and the Support Agencies' review and comment. This report, as ultimately adopted or amended by EPA, provides a basis for amended remedy selection by EPA, and documents the development and analysis of remedial alternatives. Respondent shall refer to the RI/FS Guidance for an outline of the report format and the required report content, and a suggested format for the report can be found in Attachment B. Respondent shall prepare a final FFS report which satisfactorily addresses the comments.

## TASK 6 - Compliance with Substantive Requirements of NPDES Program

The Clean Water Act prohibits discharging pollutants through a point source to a water of the United States, unless an NPDES permit has been obtained. NPDES permits in Idaho are issued by the IDEQ for industrial dischargers under the Idaho Pollutant Discharge Elimination System (IPDES) program. Section 121(e)(1) of CERCLA, 42 U.S.C. § 9621(e)(1), provides an exemption from the requirement to obtain permits for remedial actions conducted entirely onsite, where such remedial actions are selected and carried out in compliance with CERCLA 42 U.S.C. § 9621. However, Respondents must still meet the substantive requirements of all ARARs, including those in the NPDES program.

Respondent currently discharges water extracted from onsite production wells under NPDES permit ID-000119-8 which has a limit only on thermal loading to Soda Creek. This NPDES permit will remain unaffected by the CERCLA actions at the Site and Respondent will remain subject to the terms of the permit. If the selected amended remedy includes the extraction and treatment of groundwater from on-site wells followed by discharge of extracted water to Soda Creek, such discharges would constitute an onsite CERCLA discharge. In such a case, Respondent will meet the substantive requirements of ARARs (including those of the NDPES/IPDES program) for the CERCLA COCs that are in this discharge.

#### <u>Identification of IPDES Substantive Requirements</u>

In addition to continuing to comply with its existing permit, Respondent will identify and comply with all substantive requirements of the IPDES Program as part of the ARAR process. Respondent will outline requirements for establishing effluent limitations for point source discharges from the Plant Production Wells and the Water Treatment system in the SRI Report. The effluent limitations must take into consideration the potential impacts to water quality in Soda Creek, which has a presumed beneficial use of Cold Water Aquatic Life and Secondary Contact Recreation. In addition, to comply with the substantive requirements of ARARs (the CWA and IDPES program), Respondent will monitor Water Treatment system discharges (i.e., effluent limits) on a monthly basis and report the results to EPA. Effluent limits and monitoring will include all COCs, including selenium and phosphorus. Other monitoring may include but is not limited to surface water (annually), sediments (every 5 years), benthic macroinvertebrates (TBD), and fish (TBD).

#### REFERENCES FOR CITATION

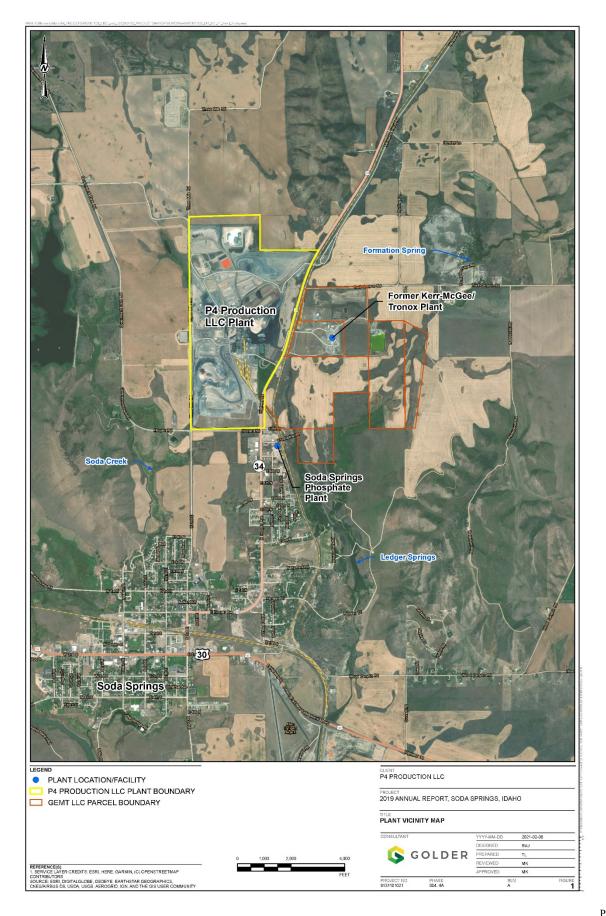
The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process.

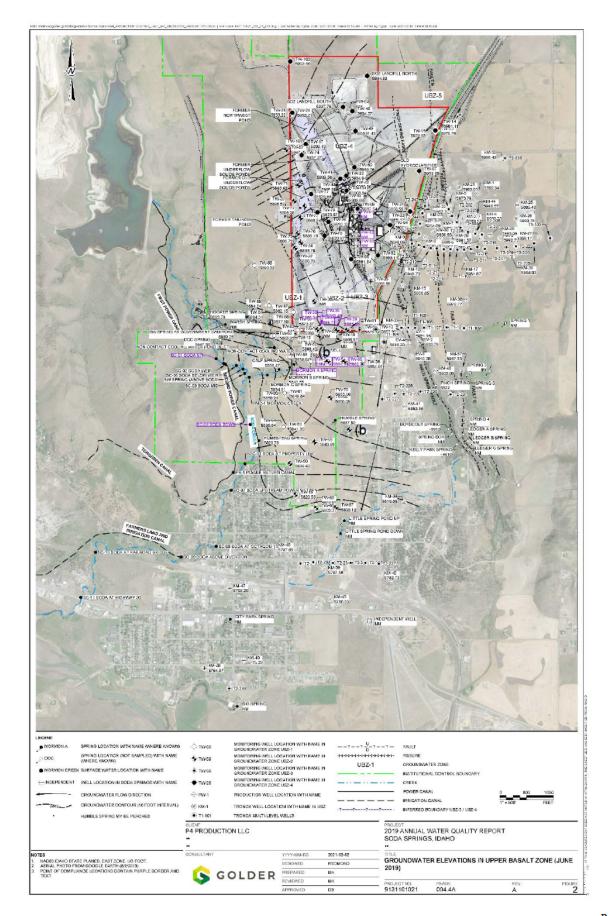
- The (revised) National Oil and Hazardous Substance Pollution Contingency Plan (NCP).
- "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA", U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 9355.3-01.
- "Guidance on Oversight of Potentially Responsible Party Remedial Investigations and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, OSWER Directive No. 9835.3.
- "Interim Guidance on Potentially Responsible Party Participation in Remedial Investigation and Feasibility Studies", U.S. EPA, Office of Waste Programs Enforcement, Appendix A to OSWER Directive No. 9355.3-01.
- "A Compendium of Superfund Field Operations Methods", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.
- U.S. EPA, NEIC Policies and Procedures Manual", May 1978, revised November 1984, EPA 330/9-78-991-R.
- Implementing Presumptive Remedies, EPA, Office of Emergency and Remedial Response, EPA-540-R-97-029, October 1997.
- Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Ground Water at CERCLA Sites, OSWER 9283.1-12, EPA-540-R-96-023, October 1996.
- Superfund Ground Water Issue: Ground Water Sampling for Metals Analysis, EPA, EPA/540/4-89/001, March 1989.
- Resources for Strategic Site Investigation and Monitoring, EPA, OSWER, EPA-542- F010030b, September 2001.
- Ground Water Issue: Suggested Operating Procedures for Aquifer Pumping Tests, U.S. EPA, OSWER, EPA/540/S-93/503, February 1993.
- "Data Quality Objectives for Remedial Response Activities", U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.
- "Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Research and Development, Cincinnati, Ohio, QAMS-004/80, December 29, 1980.

- "QA/R-5 EPA Requirements for Quality Assurance Project Plans (latest draft or revision)
  - QA/G-5 EPA Guidance for Quality Assurance Project Plans (latest draft or revision)
- QA/G-4HW Data Quality Objectives Process for Hazardous Waste Site Studies (latest draft or revision)
- QA/G-4 Guidance for the Data Quality Objective Process" (latest draft or revision). "Interim
- Guidelines and Specifications for the Lead Agency(ies) Quality Assurance Project Plans", U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.
- "Users Guide to the Lead Agency(ies) Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.
- "Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements", U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
- "CERCLA Compliance with Other Laws Manual", Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (draft), OSWER Directive No. 9234.1-01 and -02.
- "Guidance on Remedial Actions for Contaminated Groundwater at Superfund Sites", U.S. EPA, Office of Emergency and Remedial Response, (draft), OSWER Directive No. 9283.1-2.
- "Draft Guidance on the Lead Agency(ies) Superfund Decision Documents", U.S. EPA, Office of Emergency and Remedial Response, March 1988, OSWER Directive No. 9355.3-02.
- "Risk Assessment Guidance for Superfund--Volume I, Human Health Evaluation Manual (Part A)", December 1989, EPA/540/1-89/002.
- "Risk Assessment Guidance for Superfund--Volume II Environmental Evaluation Manual", March 1989, EPA /540/1-89/001.
- "Guidance for Data Usability in Risk Assessment", October 1990, EPA /540/G-90/008.
- "Performance of Risk Assessments in Remedial Investigation/ Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)", August 28, 1990, OSWER Directive No. 9835.15.
- "Supplemental Guidance on Performing Risk Assessments in Remedial Investigation Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs)," OSWER Directive No. 9835.15(a), July 2, 1991.
- "Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions", April 22, 1991, OSWER Directive No. 9355.0-30.
- "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments" EPA/540/R-97-006. June 1997.

- Guidelines for Ecological Risk Assessment, EPA, EPA/630/R-95/002F, April 1998.
- The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments, EPA, OSWER Publication 9345.0-14, EPA/540/F-01/014, June 2001.
- Ecotox Thresholds, EPA, OSWER Publication 9345.0-12FSI, EPA/540/F-95/038, January 1996.
- Issuance of Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites, EPA, OSWER Directive 9285.7-28P, October 7, 1999.
- "Health and Safety Requirements of Employees Employed in Field Activities", U.S.EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.
- OSHA Regulations in 29 CFR 1910.120 (Federal Register 45654, December 19, 1986).
- Role of Background in the CERCLA Cleanup Program, EPA, OSWER 9285.6-07P, April 26, 2002.
- "Interim guidance on Administrative Records for Selection of CERCLA Response Actions", U.S. EPA, Office of Waste Programs Enforcement, March 1, 1989, OSWER Directive No. 9833.3A.
- "A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents," EPA, Office of Solid Waste and Emergency Response, OSWER Directive No. 9200.1-23P, EPA 540-R-98-031, July 1999.
- "Community Relations in Superfund: A Handbook", U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9320.0-03B.
- "Community Relations During Enforcement Activities and Development of the Administrative Record", U.S. EPA, Office of Waste Programs Enforcement, November 1988, OSWER Directive No. 9836.0-1A.
- GOLDER ASSOCIATES INC RECENT REPORTS FOR MONSANTO CHEMICAL CO. SUPERFUND SITE
- Golder Associates Inc., 2019. 2019 Groundwater and Surface Water Sampling Work Plan, Monsanto Soda Springs.
- Golder Associates Inc., 2019. 2019 Summary Report Groundwater Conditions at the Monsanto Soda Springs, Idaho Plant. *Note: This report is prepared annually.*
- Golder Associates Inc., 2019. UBZ-1 and UBZ-2 Extended Pumping Test Addendum to Work Plan for Hydrogeologic Characterization of UBZ-1 and UBZ-2 for Extended Pumping Test.
- Golder Associates Inc., 2018. Off-Site Soil Sampling Report Fourth CERCLA Five Year Review.

- Golder Associates Inc., 2018. Soda Creek Sediment Sampling and Analysis Fourth Five Year CERCLA Review.
- Golder Associates Inc., 2017. Work Plan for (2017 UBZ-2, 3 and 4) Monitoring Well Installation and Testing.
- Golder Associates Inc., 2017. Work Plan for Off-Site Soil and Sediment Sampling Fourth CERCLA Five Year Review.
- Golder Associates Inc., 2017. Addendum to Work Plan for Hydrogeologic Characterization of UBZ-1 and UBZ-2 for Extended Pumping Test.
- Golder Associates Inc., 2016. Addendum to Work Plan for Hydrogeologic Characterization of UBZ-1 and UBZ-2, dated August 5, 2014 Pumping Tests.
- Golder Associates Inc., 2015. Report on Phase II UBZ-2 Source Area Investigation.
- Golder Associates Inc., 2015. Sampling of Domestic Wells in Soda Springs.
- Golder Associates Inc., 2014. Work Plan for Hydrogeologic Characterization of UBZ-1 and UBZ-2.
- Golder Associates Inc., 2014. Draft Selenium Treatment Technology Screening.
- Golder Associates Inc., 2013. Report on Source Area Investigation UBZ-2 Phase 1.
- Golder Associates Inc., 2012. Work Plan for Groundwater Flow and Transport Modeling Monsanto Soda Springs Idaho Plant.
- Golder Associates Inc., 2011. Work Plan for Upper Basalt Zone (UBZ-2) Source Area Characterization.





#### **Attachments**

## Attachment A - Suggested SRI Report Format

- 1. Executive Summary
- 2. Introduction
  - 2.1. Purpose of Report
  - 2.2. Site Background
    - 2.2.1. Site Description
    - 2.2.2. Site History
    - 2.2.3. Previous Investigations
  - 2.3. Report Organization
- 3. Study Area Investigation
  - 3.1. Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
    - 3.1.1. Surface Features (topographic mapping, etc.)(natural and manmade features)
    - 3.1.2. Contaminant Source Investigations
    - 3.1.3. Meteorological Investigations
    - 3.1.4. Surface Water and Sediment Investigations
    - 3.1.5. Geological Investigations
    - 3.1.6. Soil and Vadose Zone Investigations
    - 3.1.7. Groundwater Investigations
    - 3.1.8. Human Population Surveys
    - 3.1.9. Ecological Investigations
  - 3.2. If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter
- 4. Physical Characteristics of the Study Area
  - 4.1. Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
    - 4.1.1. Surface Features
    - 4.1.2. Meteorology
    - 4.1.3. Surface Water Hydrology
    - 4.1.4. Geology
    - 4.1.5. Soils
    - 4.1.6. Hydrogeology
    - 4.1.7. Demography and Land Use
    - 4.1.8. Ecology
- 5. Nature and Extent of Contamination
  - 5.1. Presents the results of Site characterization, both natural and chemical components and contaminants in some, but not necessarily all, of the following media:
    - 5.1.1. Sources (lagoons, sludges, tanks, etc.)
    - 5.1.2. Soils and Vadose Zone
    - 5.1.3. Groundwater
    - 5.1.4. Surface Water and Sediments
    - 5.1.5. Air
- 6. Contaminant Fate and Transport

- 6.1. Potential Routes of Migration (i.e., air, groundwater, etc.(
- 6.2. Contaminant Persistence
  - 6.2.1. If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest
- 6.3. Contaminant Migration
  - 6.3.1. Discuss factors affecting contaminant migration for the media of importance (e.g., sorption onto soils, solubility in water, movement of groundwater, etc.)
  - 6.3.2. Discuss modeling methods and results, if applicable
- 7. Risk Assessment Summary
  - 7.1. Human Health Risk Assessment Approach
  - 7.2. Screening Level Ecological Risk Assessment Approach
  - 7.3. Summary of Human Health Risk Estimates
  - 7.4. Summary of Ecological Risk Estimates
  - 7.5. Uncertainty in Risk Assessment
- 8. Summary and Conclusions
  - 8.1. Summary
    - 8.1.1. Nature and Extent of Contamination
    - 8.1.2. Fate and Transport
    - 8.1.3. Risk Assessment
  - 8.2. Conclusions
    - 8.2.1. Data Limitations and Recommendations for Future Work
    - 8.2.2. Recommended Remedial Action Objectives

## Appendices

- A. Risk Assessment Report
- B. Technical Memorandum on Field Activities (if available)
- C. Analytical Data and QA/QC Evaluation Results

## Attachment B - Suggested Format for Focused Feasibility Study Report

- 1. Executive Summary
- 2. Introduction
  - 2.1. Purpose and Organization Report
  - 2.2. Background Information (Summarized from SRI Report)
    - 2.2.1. Site Description
    - 2.2.2. Site History
    - 2.2.3. Nature and Extent of Contamination
    - 2.2.4. Contaminant Fate and Transport
    - 2.2.5. Risk Assessment
- 3. Identification and Screening of Technologies
  - 3.1. Introduction
    - 3.1.1. Remedial Action Objectives Present the development of remedial action objectives for each medium of interest (i.e., groundwater, soil, surface water, air, etc.). For each medium, the following should be discussed:
      - 3.1.1.1. Contaminants of Concern
      - 3.1.1.2. Allowable exposure based on risk assessment (including ARARs)
      - 3.1.1.3. Development of Preliminary Remediation Goals (PRGs)
  - 3.2. General Response Actions For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
  - 3.3. Identification and Screening of Technology Types and Process Options. For each medium of interest, describe:
    - 3.3.1. Identification and Screening of Technologies
    - 3.3.2. Evaluation of Technologies and Selection of Representative Technologies
- 4. Development and Screening of Alternatives
  - 4.1. Development of Alternatives Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the Site as a whole.
  - 4.2. Screening of Alternatives (if conducted)
    - 4.2.1. Introduction
    - 4.2.2. Alternative 1
      - 4.2.2.1. Description
      - 4.2.2.2. Evaluation
    - 4.2.3. Alternative 2
      - 4.2.3.1. Description
      - 4.2.3.2. Evaluation
      - 4.2.4. Alternative 3
        - 4.2.4.1. Description
        - 4.2.4.2. Evaluation
- 5. Detailed Analysis of Alternatives
  - 5.1. Introduction
  - 5.2. Individual Analysis of Alternatives
    - 5.2.1. Alternative 1
      - 5.2.1.1. Description
      - 5.2.1.2. Evaluation

5.2.2. Alternative 2

5.2.2.1. Description

5.2.2.2. Evaluation

5.2.3. Alternative 3

5.2.3.1. Description

5.2.3.2. Evaluation

5.3. Comparative Analysis

# Attachment C – Monsanto Chemical Company Superfund Site Supplemental Remedial Investigation and Focused Feasibility Study (RI/FS) Statement of Work (SOW) Schedule

#### **Scoping Deliverables:**

- Submit SRI/FFS Work Plan, Sampling and Analysis Plan, Quality Assurance Project Plan, Field Sampling Plan, the Health and Safety Plan, and SRI/FFS schedule within 120 days after the Effective Date of the ASAOC. Final SRI/FFS Work Plan due within 30 days of receipt of consolidated Agency comments.

## Supplemental Remedial Investigation Report (SRI):

- Submit draft SRI according to EPA-agreed schedule in SRI/FFS Work Plan
- Within 5 days of receipt of final laboratory data, Respondent shall provide written notification to EPA identifying receipt date of final laboratory data.
- Final SRI due within 60 days of receipt of consolidated Agency comments.

## Risk Assessment Report (RA):

- Submit draft RA workplan on specified date requested by EPA
- Submit draft RA within 60 days after submittal of draft SRI.
- Final RA due within 60 days of receipt of consolidated Agency comments.

### Focused Feasibility Study (FFS):

- Submit draft FFS within 120 days after finalization of RA Report.
- Final FFS due within 90 days of receipt of consolidated Agency comments.

#### Data Validation Summaries (DVSs):

– DVSs due within 120 days from the date of collection of the last sample from each sampling event. Within 5 days of the completion of each season's field work, Respondent shall provide written notification to EPA identifying the date of collection of the last sample from each sampling event.

#### Interim Deliverables

- Draft Interim Deliverables (i.e., Technical Memoranda for Treatability Studies Preliminary Remedial Goals, Remedial Action Objectives, etc.) as identified in the SOW, or as required by EPA, shall be submitted based on the EPA-agreed schedule in SRI/FFS Work Plan.
- Final Interim Deliverables due within 60 days of receipt of consolidated Agency comments.

## **Quarterly Progress Reports**

 Quarterly Progress Reports shall be due 30 days after the end of the previous calendar quarter.

<sup>&</sup>lt;sup>1</sup>Documents may initially be released as "draft final" pending final resolution of issues